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Assessment of Destination Brand Associations: An Application of Associative Network Theory and Network Analysis Methods

Xu Chen
Clemson University, xuc@g.clemson.edu

ASSESSMENT OF DESTINATION BRAND ASSOCIATIONS:

AN APPLICATION OF ASSOCIATIVE NETWORK THEORY AND NETWORK

ANALYSIS METHODS

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Xu Chen
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Accepted by:
Sheila J. Backman, Committee Chair
Kenneth F. Backman
William C. Norman
John D. Mittelstaedt

ABSTRACT

Recent tourism management research has seen increasing discussions of applying branding concepts into destination marketing. However, brand association and its importance in creating strong and unique brands have not been studied adequately. The purpose of this study was to identify the underlying dimensions that people use to describe destination brands and examine the structural relations of the destination's brand association.

Brand association focuses on analyzing the characteristics consumers' knowledge, perceptions and attitudes associated with a brand and how brand associations interact with each other. Research on brand association provides measurement constructs to evaluate branding effectiveness and offers marketing professionals the strategic information to build strong and unique brand identity.

Through two surveys (n=29) and individual interviews (n=13) using repertory grid method, the study elicited the brand associations of four golf destinations. Applying network analysis methods, the study examined the centralities and cohesion measures of those brand associations. The results identified brand associations that are critical in creating strong brand identities, controlling the activation other brand associations, or complement to each other. The study demonstrated the ability of network analysis in destination brand association research and provided an analytical tool for destination brand management.

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CHAPTER ONE

INTRODUCTION

The purpose of this study is to identify the underlying dimensions that people use to describe destination brands and examine the structural relations of the destinations' brand association. Recognizing they are information networks stored in consumers' memory, brand associations are best studied as networks. Associative Network Theories provide the theoretical framework for this study to identify the underlying dimensions of destination brand associations, and network analysis methods offers the tool to examine the relationships among them. This chapter introduces the brief background of the study topic, justifies its important role in destination branding and destination branding research, as well as presents the research questions of this study.

Justification for the Study

The application of branding in tourism management is a relatively new area of destination management research (Blain, Levy, & Ritchie, 2005). The destination branding concept emerged in the late 1990s. It is believed that, like most branded products, a brand power can facilitate a destination to create unique market positioning when the service and products are similar to its competitors' on the market (Morgan, Pritchard, & Piggott, 2002). The values of creating a destination brand are similar to those of general business branding: a brand creates business identity and adds value to the product or service by increasing economic asset, reducing market communication costs, and cultivating consumer loyalty (Keller & Lehmann, 2006).

In spite of the growing importance of destination branding, research on this topic has been limited to case studies, conceptual exploration, and branding principles. Brand association – a construct that focuses on what tourists know about a destination brand and how they feel and evaluate the destination brand – has not received much attention from academic researchers.

Generally speaking, the notion "brand association" refers to consumers' knowledge associated with a given brand (Aaker, 1991). Take the Coca-Cola's brand as an example, consumers may associate "red", "bubble water", "quench thirsty", "contour bottle design" and "upbeat and young" with the Coca-Cola's brand. One or several of those associations may drive them to choose Coca-Cola over Pepsi. Thus knowing brand associations and how they are preferred by the consumer is pivotal to brand management. Brand associations have been recognized as the "heart and soul of the brand" (Aaker, 1991, p. 8).

A concept closely related to brand association is consumer-based brand equity, which is defined as the "marketing effects uniquely attributable to the brand" (Keller, 1993, p. 1). Consumer-based brand equity looks into the consumer's mind-set of the brand and functions as the measurement of branding effectiveness. The notion of brand of brand association is often integrated with brand equity both in concept and research.

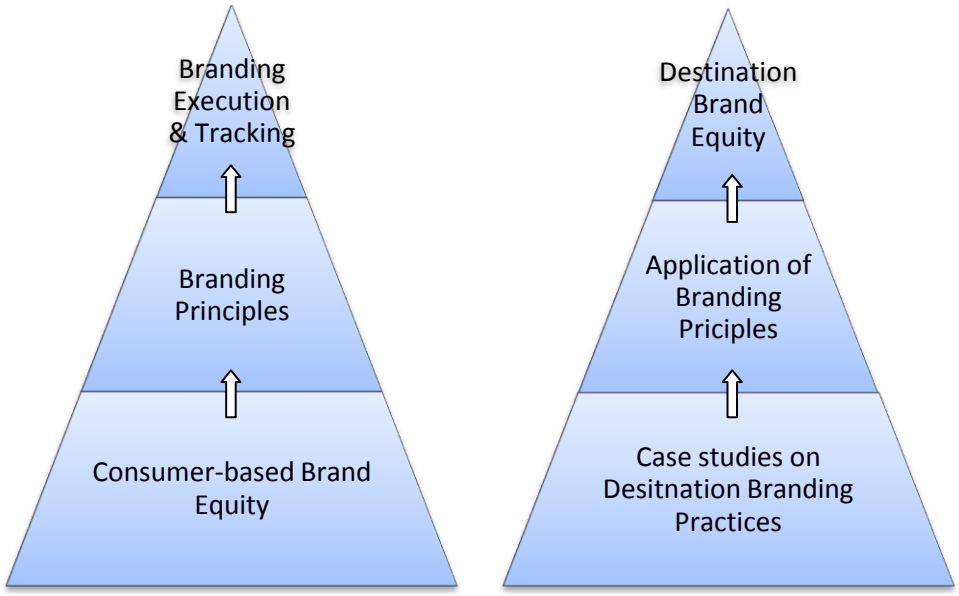
Because it probes into the constructs of a brand that the consumer has, brand equity is the foundation for other branding research in the behavioral domain to build on. Accordingly, the investigation of consumer-based brand equity is typically conducted before the application of branding principles. However, destination branding research has largely focused on case studies and the applications of brand principles before the

investigating what a destination brand means to the tourist (Konecnik & Gartner, 2007). Boo, Busser and Baloglu (2009) criticized that the academic lacks a systematic investigation of destination branding. Figure 1.1 compares the developments of branding knowledge between general marketing research and destination marketing research.

Keller (2003b) suggested that a systematic branding research shall first clarify and create its brand equity before any branding techniques can be applied (as illustrated in the left side pyramid in Figure 1.1). He suggested that consumer-based brand equity is the foundation of the branding studies and practices in the consumer-behavior related branding research domain. Brand equity research identifies the constructs that critically influence consumers' evaluation of brands. Analyzing those constructs provides the measurement construct on which various branding principles can be applied. Then after applying branding principles, consistent and continuous brand management and monitoring are required to ensure sustainable branding effects.

The tourism branding research has been taking an opposite approach. Most studies were firstly concerned with incorporating the branding concepts into destination marketing and discussing branding's importance in creating unique identity. Consequently, newly emerged branding techniques and principles were borrowed and applied to tourism. Only recently, a few researchers (see Boo et al, 2009 and Konecnik & Gartner 2007) have argued that tourism branding shall follow a similar systematic fashion as in the general branding research.

FIGURE 1.1: Developments of branding and tourism branding research



Systematic Development Recommended in Branding Research

Current Destination Branding Research Development

Currently, there are only four published articles that empirically examined destination brand equity from the consumers' perspective. The scarce amount of research regarding consumer-based destination brand equity indicates it is complex to conceptualize how tourists interpret destination brands.

Pike (2007, 2009), Konecnik and Gartner (2007), and Boo, Busser and Baloglu (2009) are the first authors that empirically measured consumer-based brand equity of destinations. Their measurements of consumer-based destination brand equity followed the Aaker (1991) conceptualization.

There are two schools of influential conceptualizations of what consumer-based brand equity is. One is Aaker's (1991): consumer-based brand equity is composed of five dimensions: brand awareness, brand associations, brand loyalty, brand quality, and other proprietary brand asset. Brand awareness is the ability of potential customers to recall the brand or recognize the brand, such as given "soft drink" category consumers can recall the "Coca-Cloa" brand. Brand quality is consumers' overall perception towards the quality of the product or service, such as "Coca-Cola is better than Pepsi". Brand loyalty is a measure of consumers' attachment to a brand, such as "I only buy Coca-Cola". Lastly, other brand assets include monetary value, trademarks or patent. In the Aaker conceptualization, brand awareness and association tell what consumers know about the brand, while brand quality and loyalty tell how consumers feel about and how they react towards the brand.

Another school of consumer-based brand equity research is Keller's (1993) conceptualization. He defined consumer-based brand equity as "the differential effect of brand knowledge on consumer response to the marketing of the brand". Consumers' brand knowledge has two major components: brand awareness and brand image. The brand image component in his definition is actually brand association as Keller clearly stated that brand image is defined as "perceptions about a brand as reflected by the brand associations held in consumer memory" (p. 2).

The difference between these two conceptualizations is on their emphasis areas. The Aaker conceptualization focuses on contributions of each component to the asset of brand equity, while the Keller conceptualization emphasizes more on the cognitive (what do consumers know) memory network of consumers brand knowledge.

Pike (2007, 2009), Konecnik and Gartner (2007), and Boo et al. (2009) studies applied Aaker's conceptualization and aimed at identifying the structures of destination brand equities. However, none of the studies examined in-depth destination brand association. In fact, Konecnik and Gartner, and Boo et al. left out the brand association component from their proposed brand equity models and replaced it with destination image, while Pike simplified brand association into importance-performance in his studies. However, either destination image or importance-performance analysis cannot sufficiently substitute brand association because (1) they lacked of brand identity, and (2) they identified several images that overlap with brand association but they certainly did not provide insights related to how associations are configured.

The tourism studies closely related to the concept of destination brand association are destination brand image studies. However, most of these brand image studies used predefined items that were typically used in destination image studies to measure brand images. For instance, Kneesel, Baloglu and Millar (2010) considered that a person's destination brand image is composed of his or her cognitive and affective attitudes towards a destination's brand. Kneesel et al. used predefined items that were selected from relative studies and measured destination brand images of four casino cities in the US among an adult Americans sample. They used general linear model repeated measure to test the difference among the four destinations. There are two limitations of such conceptualization and measurement. First, the researchers assume that all the predefined items already exist in the consumer's mind and compose a brand image. Second, the measurement items in the predefined list exist independently and cannot identify the

inter-linkages among them. Thus using traditional sorting and scaling tasks cannot represent a multimodal image of a brand (Teichert & Schöntag, 2010).

In sum, the major contributions of the research discussed, is that the findings showed that destination brand equity exists and the components that influence behavioral intention (i.e. brand loyalty) are present. According to Aaker's conceptualization, brand awareness and association tell what consumers know about the brand, while brand value and loyalty tell how consumers feel and react towards the brand. Consequently, the above destination brand equity studies focused on consumer and brand relationships, not what consumers knew about the brand. Brand association – the concept that underlies people's perceptions about destination brand – still has not been investigated in-depth. Recently, Teichert and Schöntag (2010) criticized that methods used in the traditional approaches in consumer-behavior related brand analysis only functioned as sorting and scaling tools, such as factor analysis and multidimensional scaling, which were unable to reflect the mental connections of consumers' brand knowledge. They called for a new brand analysis method that could go beyond sorting and scaling and reveal the mental network structure of consumers' brand knowledge.

To study brand association, it is important to recognize that a basic function of brand is to act as a cue for consumers to retrieve information in memory related to the branded product or service. As it is commonly agreed that consumer store information in memory in the form of networks (Henderson, Iacobucci, & Calder, 1998, 2002), it would be appropriate to analyze the brand association as a memory network.

A generally used method to study brand association is the Associative Network Theory (e.g. Anderson, 1983; Janiszewski & Van Osselaer, 2000; Roedder-John, Loken,

Kim, & Monga, 2006), which is based on the psychological theory of memory retrieval and provides a tool to map consumers' brand concept. The Associative Network Theory is grounded in the cognitive psychology of memory retrieval, and generally holds that human's memory network is comprised of nodes, which correspond to particular pieces of information, and links that connect various nodes. When a person receives a stimulus, certain nodes are activated corresponding to the stimulus. These nodes become activation nodes and spread the activation to other nodes through the links between them. The depth and breadth of the activation depend on the distance of the to-be-activated node to the stimulus.

Henderson et al. (1998, 2002) advanced brand association analysis by incorporating network analysis methods into the associative network theory. Network analysis examines the relationships between nodes and links, and nodes and nodes by examining the indices of "centrality", and "cohesion". Centrality is a set of indices to measure the properties of an individual node relative to other nodes. Cohesion is to measure the equivalence of structural position among groups of nodes. Henderson et al.'s advancement in brand association network provides an analytical tool that goes beyond the basic applications of associative network theory, such as brand concept mapping and eyeball analysis of brand associations.

Instead of focusing on the technical tutorial, Teichert and Schöntag (2010) discussed the limitations of the traditional approach using predefined scales and explained applicability of network analysis measures in branding research and practices. They also emphasized the centrality and cohesion measures that are similar with Henderson et al.'s (1998) discussion. Teichert and Schöntag suggested that brand

network analysis can be done on the individual, group and holistic network levels to provide insights for brand management with short-term, mid-term and long term goals.

The discussions above show that the investigation of destination brand association provides the most fundamental knowledge in the development of academic destination branding research. However, this construct has been largely overlooked in destination branding research. Therefore the primary focus of the current research is on destination brand association from a theoretical and practical perspective to improve the analysis of tourism destination brands, and provide an analytical tool for strategic brand management.

The emerging interest in applying branding principles to destination management has drawn the attention from researchers and practitioners. The challenge for research is to clarify the construct of destination brand. For destination branding practice, the challenge is to determine what resources a destination has can be used to make a strong brand. An analysis of consumer-based brand equity through investigating brand association proved advantageous to the theoretical development of destination branding research as well as to marketing practice.

Problem Statement

The lack of research regarding the destination branding measurement may be an indication of the complexity involved in understanding how tourists evaluate a destination brand. Unlike general products, a destination is a much more complex multidimensional entity consisting of various components that have no obvious core that anchors them (Pike, 2008).

The limited amount of research on consumer-based destination brand equity employed the Aaker (1991, 1996) conceptualization and focused on the investigating the relationship among the components of brand equity, with the ultimate goal of creating brand loyalty. Although brand loyalty is the long-term goal of branding, one must begin with perception before moving onto ultimate choice. Brand association has not received attention in destination branding research, especially from a network perspective. As brand association portrays the underlying dimensions that people use to describe destinations, it is critical for destination branding research to thoroughly investigate brand association before moving onto other branding concepts that are built on it.

Purpose and objectives of the Study

The purpose of this dissertation study is to identify the underlying dimensions that people use to describe destination brands and examine the structural relations of the destination's brand association. To reach this purpose, associative network theory serves as the theoretical foundation and network analysis method provides analytical tool for the research. Specifically, the dissertation has the following objectives:

- To identify brand associations of a destination's brand,
- To categorize the dimensions of destination brand associations, and
- To examine the relationships within the brand association network, focusing on centrality and cohesion measures.

The first two objectives aim at underlying the dimensions of a destination brand construct. The third objective aims at the deeper understanding of brand association structure and identifying the core associations that are critical within the network.

Research Questions

To reach the research objectives, this study answers three research questions:

- What are the associations people use to describe a destination brand?
- What are the categories of these associations?
- What are the structural relationships among these associations?

Significance of the Study

The result of this study advances the current understanding of destination brand equity, as well as provides practical implications for destination branding practice.

For academic research, as its role is to create and maintain the brand equity (Aaker, 1996a), brand association underlies the elements that constitute a brand. Thus, any insight into the measurement of brand association is beneficial to brand equity research. This dissertation study contributes to the understanding of the nature of destination brand, and provides foundational elements for the development of brand construct theories.

For practitioners, brand associations analysis offers explicit information about the core elements in a brand, the strengths and weaknesses of a brand, and the associations that are crucial to create unique brands. Thus, such analysis provides strategic information such as brand identity, driver association, and complementary associations, for the branding practice. The study also provides an example of measurement method for conducting similar research in the future.

Definitions

Branding: is the application of marketing techniques to a specific brand. It seeks to increase the product's perceived value to the customer and thereby increase brand equity.

Brand equity: is a "set of associations and behaviors on the part of a brand's customers, channel members and parent corporation that permits the brand to earn greater volume or greater margins that it could without the brand name that gives the brand a strong, sustainable, and differentiated competitive advantage" (Marketing Science Institute, 1988, p. 6).

Brand knowledge: is a function of awareness, which relates to consumer's ability to recognize or recall the brand, and image, which consists of consumers' perceptions and of associations for the brand (Keller, 1998),

Destination brand: is the sum of distinguishing characteristics of a destination that identify the destination from its competitors. In most destination branding studies, destination brand is often represented by the geographical name of the destination.

Destination branding: is the marketing technique to enhance the brand equity of the destination's brand, and to influence potential tourists' behaviors.

Consumer-based brand equity: is the differential effect of brand knowledge on consumer response to the marketing of the brand (Keller, 1993).

Destination brand equity: is the differential effect of brand knowledge on tourist response to the marketing of the destination. It is reflected as a set of brand associations in consumer memory and defined by the characteristics and relations of the brand association.

Brand association: is anything linked in consumer memory to a brand. It creates meaning for consumers and is the core of consumer-based brand equity (Aaker, 1991).

Centrality: is a measurement index based on the location of a node within a network relative to other nodes. It has three types: degree, betweenness, and closeness. Centrality indices aim to uncover the brand associations that are most pivotal to create strong brand images.

Degree centrality: is a measurement to identify core nodes that can activate most associations.

Betweenness centrality: reflects the likelihood that a node will be activated as associations spread out throughout the network.

Closeness centrality: measures how close a node is to other nodes. It represents independence of a node from the control of other nodes in a network.

Cohesion: is a measure of the subgroups within a social network. It provides the implication as to what brand associations are complementary to each other.

Social network: is a network structure composed of individuals, also known as "nodes" and the links that tie nodes. Social network analysis aims at understanding the network structure by description, visualization and statistical modeling (van Duijn & Vermunt, 2006).

Outline of the Dissertation

The dissertation is organized into six chapters. Chapter One provides an overview of branding, its application in destination marketing, and justifies the rationale and significance of the dissertation study. Chapter Two examines the related literature in

branding and destination branding research, and explains the theoretical models for this study. Chapter Three presents the conceptual framework for this study. Chapter Four presents the research design and methods that are used to conduct the study. Chapter Five records the pilot testing and justifies the modification on research methods. Chapter Six provides the analysis of the research questions. Chapter Seven reviews the study, discusses the meaning of the findings, its theoretical contributions and managerial implications, recognizes the limitations, and makes recommendations for future research.

CHAPTER TWO

LITERATURE REVIEW

This chapter provides an examination of current branding studies in marketing and destination marketing research. This chapter is divided into five sections. The first section discusses the concept of consumer-based brand equity, its definitions and components, as well as the role of brand equity in branding research. The second section examines the concept of brand association, its position in consumer-based brand equity, and its measurement methods. The third section reviews the current research of destination branding, different foci areas in tourism branding research. The fourth section reviews consumer-based brand equity research in destination branding setting. The fifth section provides a summary of this chapter.

Brand Equity

As one the fundamental concepts of brand, research of consumer-based brand equity is essential and fundamental to branding research (Cai, 2002). The word "equity" originates from the field of accounting and refers to the difference between the value of the net tangible assets of a company and the higher price that a buyer will pay to acquire the company (Keller, 2001). The importance of brand equity can be seen from its marketing implication and its role in branding studies.

Being a leverage of a brand, brand equity is considered a source of firm competitive advantages (Aaker, 1996a; Farquhar, 1989). Such advantages include effective market communication, price premium attained, possibility to retain brand

loyalty, increased customer demand and satisfaction, increased brand health and facilitation in brand extension. Keller (1993), for example, proposed that creating a high brand equity favors market communication efficiency, thus reduces marketing cost and increase the power of influencing purchase behavior. Brand equity provides value to customers by enhancing their interpretation/processing of information, confidence in the purchase decision, and use satisfaction (Aaker, 1991).

For the development of branding studies, consumer-based brand equity is fundamental to other branding constructs related to consumer behaviors. Keller (1993, p. 2) stated that consumer-based brand equity reveals what consumers know about brands and "suggests both specific guidelines for marketing strategies and tactics and areas where research can be useful in assisting managerial decision making". In this sense, consumer-base brand equity identifies a set of brand constructs, which are the measurement objects in consumer behavior related branding research areas and branding principles.

The Marketing Science Institute (Anantachart, 1998, p. 13) defined brand equity as a "set of associations and behaviors on the part of a brand's customers, channel members and parent corporation that permits that brand to earn greater volume or greater margins that it could without the brand name and that gives the brand a strong, sustainable, and differentiated competitive advantages." This definition has lead to a wide range of conceptualizations of what brand equity is. Generally it can be defined from the perspectives of financial trade, and consumer marketing. From financial trade perspective, brand equity is the incremental discounted future cash flows that would result from a product having its brand name compared to the same product without the

presence of its brand name (Simon & Sullivan, 1993), such as the estimated $68 billion worth of the Coca-Cola brand (InterBrand, 2009). From consumers' perspective, brand equity is a function of associations that have built and nurtured around the branded product or service (Anantachart, 1998). This function may simply represent what the product or service is, or reflect the value of a brand, such as product performance (e.g. Nike running shoes are comfortable and durable), emotional benefits (e.g. I like Nike), and consumer's lifestyle (e.g. Nike fits my active lifestyle).

Because of its important role in consumer branding, brand equity has become a major issue in brand research. Research has been concentrated on the conceptualization as well as the measurement of brand equity. The most influential works are Aaker (1991, 1996b) and Keller's (1993) research on consumer-based brand equity conceptualization.

Aaker (1991, p. 4) defined consumer-based brand equity as "a set of assets …that are linked to the brand…and add (or subtract) value to the product or service being offered". He stated that the assets and liabilities on which brand equity is based can be grouped into five categories: brand loyalty, name awareness, perceived quality, brand association, and other proprietary brand asset such as patent, trademarks, channel relationships, etc. Brand loyalty reduces the brand's vulnerability to competitive action. Name awareness put the brand into the consideration set of consumer decision making. Perceived quality influences purchase decision, supports a premium price and becomes a basis for brand extension (such as the "Apple" brand extends from computer manufacturing into cell phone and online entertainment businesses), while brand association provides direct input for branding strategies as well as the basis of a brand extension, such as identifying most important associations that influence brand

evaluations. Aaker proposed that these five components are the underlying bases of consumer-based brand equity.

Keller (1993) conceptualized consumer-based brand equity as the differential effect of brand knowledge. He posited that consumer-based brand equity occurs when "the consumer is familiar with the brand and holds some favorable strong and unique brand associations in memory" (Keller, 1993, p. 2). According to Keller, the brand knowledge is comprised of brand awareness and brand images. Brand awareness consists of brand recognition and brand recall. Brand recognition refers to the consumer's ability to correctly discriminate the brand as having been seen or heard previously (e.g. a person has heard of "Coca-Cola"). Brand recall is the consumer's ability to retrieve the brand in the presence of the product category or some other type of probe as a cue (e.g. given "soft drink" as a cue, a consumer can recall "Coca-Cola"). Brand image, in Keller's definition, is essentially brand association. He defined brand image as "reflected by the brand associations held in consumer memory" (Keller, 1993, p. 3).

Aaker and Keller both emphasized that brand association is a most important component of brand equity. Because brand associations are anything linked to a brand (Aaker, 1991), and are consumers' knowledge about a brand (Keller, 1993), measuring brand associations is to understand the meaning of the brand, and underlie the basic elements in brand knowledge.

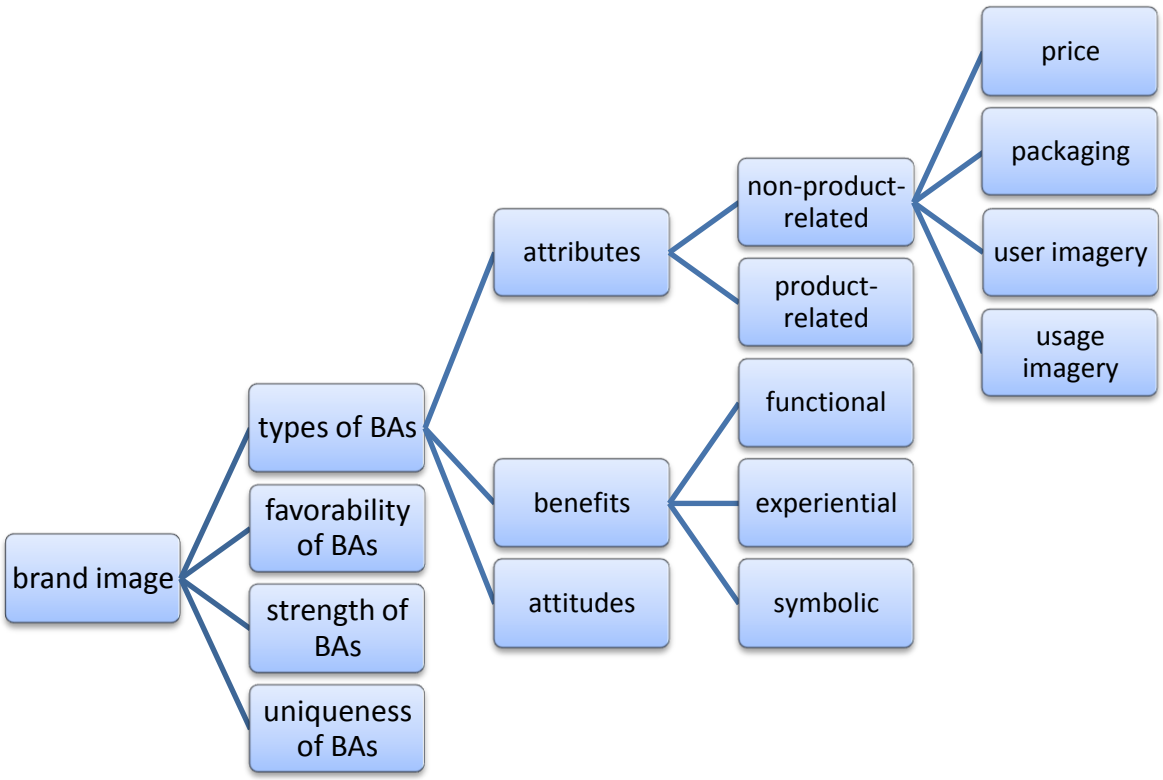
Brand Association

Aaker (1991) and Keller (1993) both had thorough discussion on brand associations. Aaker (1991, p. 114) categorized 11 types of associations that can be

generated from brand names or symbols. They are: 1) product attributes, 2) intangibles, 3) customer benefits, 4) relative price, 5) use/applications, 6) user/customer, 7) celebrity/person, 8) life-style/personality, 9) product class, 10) competitors, and 11) country/geographic area. Aaker (1991) posited that these associations create values to a brand by helping process and retrieve information, providing a basis for differentiation, offering a reason-to-buy, creating positive attitudes and feelings, and building the basis for extensions.

Keller (1993) presented a different classification of brand associations based on their increasing abstraction: attributes, benefits, and attitudes (see Figure 2.1). Attributes are descriptive features of a product or service, and can be broken down to product related (e.g. "sports apparel" associated to "Nike") and non-product related attributes (e.g. "Tiger Wood in Nike commercials"). Benefits are personal values consumers attach to the attributes, including functional benefits (e.g. "durable running shoes"), experiential benefits that are related to what feels like of using the product ("feels good wearing Nike"), and symbolic benefits that are related to underlying needs for social approval or personal expression and outer-directed self-esteem (e.g. "standard golfing attire for professionals"). Brand attitudes are consumers' overall evaluations of a brand (e.g. "I prefer Nike to other brands when it comes to sportswear and equipment).

FIGURE 2.1: Keller's classification of brand associations



Keller (1993) stated that brand associations differs not only just on types, but also vary according to their favorability, strength, and uniqueness. Favorability is the consumer's predispositions toward a brand. Strength refers how strong a consumer feels that a particular association is linked to a brand. Uniqueness refers to the portion of brand associations shared by other competing brands or are common to the category of the branded product or service. Keller provided an exhaustive discussion on the structure and characteristics of brand association, but the discussion stayed on the conceptual level. Keller did not apply these discussions into empirical measurements.

Empirically, the brand association measurement has two goals. One is to identify the associations, and the other is to evaluate these associations as the measure of brand equity performance. Although the concept of brand association is developed from the associative memory network model, the measurement methods in brand association studies did not necessarily follow this theoretical model. Table 2.1 presents a selected amount of studies on brand association studies.

To measure brand associations, one must begin with eliciting brand associations. Two methods are commonly used in brand association elicitation and measurement: free association, and perceptual mapping (Henderson, 1995). Free association method asks respondent to "describe that the brand means to them in an unstructured formation, either individually or in small groups" (Keller, 1993, p. 12). Using free association allows the researcher to "indentify the range of possibilities…in consumers' minds", but is limited to provide a "*rough* indication of their relative strength, favorability, and uniqueness" (Keller, 1998, p. 312).

TABLE 2.1: List of selected brand association studies

Authors	Title	Research Questions	Variables Measured	Methods	Suggestions
Krishnan (1996)	Characteristics of memory associations: a consumer-based brand equity perspective	• To identify various associations characteristic underlying BE	• Set size • Valence • Uniqueness • Origin	• Free association • Frequency • T-test	• Advance this model for brand equity measurement • Inter-brand analysis • Brand association variation across market segments
Henderson et al. (1998)	Brand diagnostics: Mapping branding effects using consumer associative networks	• To demonstrate network analysis methods in BA research	• Centrality • Cohesion • Position • Density • Structure equivalence	• Repertory gri • Network algorithm ana	• To empirically test these methods in intra-brand and inter-brand analyses
Low & Lamb (2000)	The measurement and dimensionality of brand associations	• To test a BA conceptualization that consists of B-image, B-attitude, and perceived quality	• Brand image • Brand attitude • Perceived quality	• Structured measurement items • CFA	• Incorporate company BAs • Test B-personality dimension
Supphellen (2000)	Understanding core brand equity: Guidelines for in-depth elicitation of brand associations.	• To comment on techniques for gaining in-depth BAs	N/A	N/A	• Long-personal interviews • Metaphor • Visualization & verbalization • validate
Gladden & Funk,(2001)	Understanding brand loyalty in professional sport: Examining the link between brand associations and brand loyalty	• To investigate the sports fans' BA and B-loyalty of their sports team	• BA • B-loyalty	• Structured measurement • regression	• re-test the same scale in long terms and cross cultures
Chen (2001)	Using free association to examine the relationship between the characteristics of brand associations and brand equity	• To identify the types of BAs, and • To examine the relationships between BA characteristics and BE	• Type • Set size • favorability	• Free association • Frequency • T-test	• Cross cultural re-examination • Re-examination of the BA model through other research design

Table 2.1(Continued)

Cai (2002)	Cooperative branding for rural destinations	• To test a conceptual model of destination branding	• Perception of destinations associations, including: attributes, benefits and attitudes	• Structured measures • MDS	• Refining and modifying the model beyond the rural setting

Note: B- (Brand-), BA (brand association), BE (brand equity)

Perceptual mapping is another method to study brand association. Strictly speaking, perceptual mapping is not a tool to elicit associations but a method to explore similarities and dissimilarities among provided associations. Perceptual mapping with multidimensional scaling technique is based on the pairwise similarity judgments. To compare the similarities and dissimilarities, the researcher must provide participants with an exhaustive list of attributes upon which to base their assessment of the product or service. Using Henderson's (1995) example, the perceptual mapping technique gives seven sports car brands and asks participants to evaluate how similar each pair is on a 1-to-9 scale. Since there are seven brands, then on the brand name, there will be 21 pairs to compare, let alone other attributes such as performance and country of origins that can be compared across different car brands. Thus this list can be exhaustive and the workload participation is heavy. Steenkamp and Van Trijp (1994) mentioned two issues that are critical to assure validity of this method. First, the researcher must be able to provide a complete, valid, and exhaustive set of pre-determined attributes. Second, all attributes must be relevant to all consumers, non-specific to a certain group of consumers, and must attach the same meaning to all consumers.

A less used but strongly advocated method in brand association research is the Repertory Grid Technique (RGT). Similar to free association technique, RGT is also a qualitative technique to elicit brand associations from the subject rather than the researcher. Kelly (1959) created this method for the psychological measurement of personal constructs. RGT has a power to build the gap between qualitative data collection and quantitative analysis techniques (Fransella, Bell, & Bannister, 2004). As the current study will use RGT to collect data, this technique will be discussed in detail in the next chapter – Conceptual Development.

After eliciting brand associations, the next question is how to measure them. Based on Keller's (1993) conceptualization, Krishnan's (1996) research focused on examining the characteristics of brand associations. Krishnan considers that brand associations can be measured on four features: number, valence, uniqueness, and origin. Number is the quantity of associations consumers can think of upon given the brand name. Valence is the net value of brand association as being positive, neutral or negative compared to the overall valence score. For instance, for the Nike brand mentioned earlier, "durability" and "soft-to-run-in" may be positive, but "expensive" may be perceived as negative". If each valence is measured as positive being 1, neutral being 0, ad negative being -1, without considering weightings, then based on the three associations above, this consumer has a valence of 1 towards the Nike brand. Uniqueness has two measures: one is the ratio between number of the associations that are not shared by competing brand and the number of all associations. The other is the ratio between the associations unrelated to product category and the number of all associations. For example, "Nike" may be associated to "athletic", "apparel", "Michael Jordan" and "swoosh". The "apparel"

association is common to all sportswear brands, while “athletic” may be shared with “Reebok”, only “Michael Jordan” and “swoosh” are unique to the “Nike” brand. Then Nike shares three unique associations (45%, i.e. 3 out of 4) unrelated to the product category and two associations (50%, i.e. 2 out 4) unrelated to its competing brand “Reebok”, noting “apparel” is also associated to “Reebok”. Origin refers to whether the source of brand association perception is direct (i.e. personal experience, trial, usage), or indirect (i.e. advertising, word-of-mouth). Direct sources have stronger positions in the brand association than indirect sources. Krishnan suggested that a brand with high equity shall have a greater number of associations, more net positive associations, more unique associations and origins more from direct sources.

To study the relationship among brand associations, brand concept mapping is a commonly used approach. The advantage of using brand maps is that “brand map not only identifies important associations, but also conveys how these associations are connected to the brand and to one another” (Roedder-John et al., 2006). The limitation for this method is that most analyses are so call “eyeball analyses” that are conducted at surface level.

Other analyses of brand association relations concentrate on its relationship with other components in brand equity incorporating complex statistical modeling. For instance, Low and Lamb (2000) measured three types of associations – image, attitude, and perceived quality – with free association method for a fictitious brand calculator, and used structural equation modeling to confirm that brand associations are multidimensional.

Different from individualistic, variable-based approach in sociological and management studies, social network analysis assumes that individuals in a given social entity are most likely connected and co-exist in intricate networks. The presence of regular patterns in relationship is known as structure or structure relations. The focuses of social network analysis are to "measure and represent these structural relations accurately, and to explain both why they occur and what are their consequences" (Knoke & Yang, 2007, p. 4).

Social network analysis has been studied more than fifty years. It gained more attention only in recent years when computer aided analysis software flourished (Knoke & Yang, 2007). Social network analysis has been an interdisciplinary/multidisciplinary method (Wasserman & Faust, 1994). It has been applied to many research fields. Several searches using keyword "social network analysis" in Proquest Dissertation/Thesis Database found 949 documents, covering the research fields of sociology, marketing, psychology, computer sciences, media communications and political sciences. Limiting the field to marketing science, the search in the database returned 18 dissertations/theses. The topics ranged from advertising to organization behaviors. However, there were no found studies on the topic of tourism branding using network analysis method.

In tourism research, associative network models have been rarely used. Similar related approaches included destination image studies using multidimensional scaling or repertory grid methods to elicit image associations. For instance, Hankinson (2004) studied the salient brand images of 25 cities the UK using repertory grid to elicit similarities and differences then applied exploratory factor analysis to draw the salient image factors. Although the studies either investigated either image associations, or

tested a few features of brand associations, those scholars did not put these associations in the perspective of an associative network.

Destination Branding Research

Destination branding studies have a much shorter history than that of the marketing literature. Prior to the branding emphasis, tourism research closely related to this topic included destination image and destination positioning, although they were not probed in the branding context. Pike (2009) stated that Dosen, Vransevic, and Prebezac (1998 cited in Pike) published a paper in 1998 that firstly used branding concepts in a destination management, almost half a century after the marketing literature had started branding research in the 1940s. The first case study in tourism branding is Pritchard and Morgan's (1998) mood-marketing as a branding strategy for Wales. Since then, destination branding has gained more attention in tourism research. Conferences and special issues of journals have since addressed the destination branding topic.

The Tourism and Travel Research Association (TTRA) 1998 annual conference themed: "Branding the Travel Market" featured eight destination branding papers. In the following year, TTRA's European chapter organized a "Destination Marketing" conference. In Macau China, the Instituto De Formacaco Turistica (*Institute for Tourism Studies)*, in conjunction with Purdue University, initiated the first "International Conference on Destination Branding and Marketing" in 2005, which is every two years.

Several academic journals also focused on destination branding. *Journal of Vacation Marketing* published the first special issues (1999, Vol.5, Iss.3) dedicated to destination branding, followed by *Journal of Brand Management* (2002, Vol.9, Iss.4-5)

and *Tourism Analysis* (2007, Vol.12 Iss.4). In 2004 a new journal, *Place Branding and Public Diplomacy*, was published and entirely dedicated to place branding.

Pike (2009) conducted an extensive review of 74 published papers on destination branding between 1998 and 2007. He categorized these papers into four concentrations: 1) 33 case studies, 2) 10 conceptual papers, 3) 28 research-based papers, and 4) three web content analyses. He noted that "the most popular type of destination branding paper has been *case studies* [emphasis added]" (p. 858). Most conceptual and case study papers were published before 2006, while most research-based papers were published in and after 2006 (see Pike 2009 for the list of these papers). This dissertation research conducted a survey of the destination branding papers published between January 2008 and September 2009 in *Academic Search Premier*, *Web of Science*, and *Google Scholar*, and found 35 research or case study papers published during this time period. In the journal of *Place Branding and Public Policy*, there are over 60 articles published in these 21 months. Most of them are reports but ten articles are original papers or case studies. Table 2.2 summarizes these 35 research publications. Publications in nearly two years show that: 1) destination branding papers have seen a rapid increase; 2) case study and research-based studies are popular, 3) stakeholders analysis started to gain more attention; and 4) political influence is emphasized in place branding.

TABLE 2.2: Research papers on destination branding in 2008 and 2009

Author, year	Focus	Country	Category
Baker & Cameron (2008)	Branding strategy	Unspecified	Research-based
Baum, Hearns, & Devine (2008)	Tourism imagery	Ireland	Research-based
Bell (2008)	Branding effect	New Zealand	Research-based
Che (2008)	Event branding	USA	Case
Coaffee & Rogers (2008)	Security as a branding notion	UK	Case
Gnoth (2008)	Stakeholders perspective	NA	Conceptual
Hanna & Rowley (2008)	Branding terminology	NA	Conceptual
Konecnik & Go (2008)	Brand equity stakeholder-based	Slovakia	Research-based
Mazurek (2008)	Brand strategy	Slovakia	Case
Nadeau, et al (2008)	Brand Image	Unspecified	Conceptual
O'Connor, Flanagan, & Gibert (2008)	Film Imagery	UK	Case
Skinner (2008)	Brand identity	NA	Conceptual
Trueman, Cook, & Cornelius (2008)	Branding and creativity	UK	Case
Vasudevan (2008)	Stakeholder	India	Case
Wang (2008)	CVB in branding collaboration	USA	Case
Ashworth & Kavaratzis (2009)	Corporate branding	Unspecified	Case
Avraham (2009)	Brand image correction	Israel	Research-based
Balakrishnan (2009)	Brand image	Unspecified	Research-based
Bergqvist (2009)	Brand strategy	Sweden	Case
Forristal & Lehto (2009)	Brand Personality	USA	Research-based
Hankinson (2009)	Branding strategy	Unspecified	Research-based
Hospers (2009)	Urban Landscape	Holland, Spain	Research-based
Hudson & Ritchie (2009)	Branding effect, campaign	Canada	Case
Jones et al (2009)	Brand identity and image	Japan	Case
Kneesel, Baloglu, & Millar (2010)	Brand image	USA	Research-based
Lee H. (2009)	Macro-branding	UAE	Case
Lee S. (2008)	Brand image and reputation	South Korea	Case
Marzano & Scott (2009)	Stakeholder	Australia	Case
Merrilees, Miller, & Herington (2009)	Brand attitude	Australia	Research-based
Ooi (2008)	Politics in Branding	Singapore	Case
Pike (2009)	Brand equity & positioning	Australia	Research-based
Stock (2009)	Film Imagery & distortion	Kazakhstan	Case
Tasci & Denizci (2009)	Activity effect, input-output	Unspecified	Conceptual
Wagner, Peters, & Schuckert (2009)	Branding effect on stakeholder	Austria	Research-based
Wanger & Peters (2009)	Brand equity stakeholder-based	Austria	Research-based

Definitions of destination branding are rooted in marketing research. However, they are not as clearly defined as product branding. So far, tourism research has not come to a consensus regarding the definition of destination brand. Kotler Bowen and Maken (2003) provided a general description of what attributes support a good destination's brand: easy identification, perception of good value for price, easy maintenance of quality and standards. Morgan et al. (2002) defined destination brand with the emphasis on branding meaning and brand recall. They conceptualize that destination brand is a "unique combination of product characteristics and added value, both functional and non-functional, which have taken on a relevant meaning that is inextricably linked to the brand, awareness of which might be conscious or intuitive" (p. 335). Blain Levy and Ritchie (2005) stressed the experience aspect in defining destination brand, that a destination brand is

> a name, symbol, logo, word mark or other graphic that both identifies and differentiates the destination; furthermore, it conveys the promise of a memorable travel experience that is uniquely associated with the destination; it also serves to consolidate and reinforce the recollection of pleasurable memories of the destination experience. (p. 329)

This definition has a background in Echtner and Ritchie's (1993) definition of destination image, which is considered as attribute-based and has psychological, functional, common and unique characteristics.

Destination brand image studies have the root in destination image research. Often, destination image is used to understand destination branding (Cai, 2002). Consequently, destination image has often been used to substitute brand image in

destination branding studies (Tasci & Kozak, 2006). This confusion is largely due to the fact that the definitions of destination image and brand image are both highly similar. Hunt (1975) coined the term "destination image" and defined it as people's impression of the regions that do not reside in. Crompton (1979, p. 18) proposed that destination image is "the sum of beliefs, ideas, and impressions that a person has of a destination". While brand image "refers to the set of association linked to the brand that consumers hold in memory" (Keller, 1993, p. 2). Baloglu and McCleary (1999) proposed a different model of destination image formation. They suggest that a destination image consists of three components: perceptual, affective, and global. The perceptual component refers to a person's beliefs and knowledge of the destination. The affective component is a person's evaluative attitudes and feelings towards the destination. The global image refers to a person's overall evaluation about the destination. Baloglu and McCleary point out that those perceptual components determine the favorability and strength of affective components. This suggestion coincides with Gartner's destination image formation model that has been used as the prototype for Konecnik and Gartner's (2007) destination brand equity research. As destination image research has a relatively long history and a strongly developed conceptualization, most conceptual and empirical destination branding research has focused on destination image to imply destination's brand image (Boo, 2006). However, such an approach overlooked one of the fundamental function of branding – the differentiation ability. Cai (2002, p. 722) highlighted the differences between the concepts that "image formation is not branding, albeit the former constitutes the core of the latter. Image building is one step closer, but still remains a critical missing link: brand identity". Thus what identified by destination image construct do not

necessarily equal to that of the destination brand. For instance, a functional image of "destination A has lot of natural trails" does not necessarily mean that "natural trail" is a suitable attribute for constructing a strong brand if its competitor destination B is also rich in natural trails.

Destination personality is another stream in the destination branding research. It borrows the branding personality concept from marketing research. J. Aaker (Aaker, 1997) posited that like humans, brands have distinct characters too. Therefore, brand personality is a "set of human characteristics associated with a brand" and consists five dimensions: *sincerity, excitement, competence, sophistication,* and *ruggedness* (Aaker, 1997, p. 347). Branding researchers believe that brand personality helps to establish the emotional attachment between the brand and its users, serves as the symbolic function of a brand meaning, and enables the consumer to express his or her own self, an ideal self and the specific dimensions of the self (J. L. Aaker, 1997).

Adapting Aaker's (1997) brand personality measurement scale, Hosany and Ekinci (2003) firstly applied it to destination personality research. Since then, they and a few other tourism scholars have used Aaker's (1997) scale on various destinations and tested the relationship among brand personality, destination images and purchase intention. However, the brand personality scale did not appear reliable as the no studies have been able to completely replicate the original five dimensions and the cross loadings are often seen in the factor structures (e.g. Austin, Siguaw, & Mattila, 2003; Bartra, Lenk, & Wedel, 2003; Caprara, Barbaranelli, & Guido, 2001; Wee, 2004) . These studies also found that the effects of brand personality on purchase intention was low, and the ability to differentiate destination's uniqueness was weak as most traits only describes the

personality characters of the product category rather than the individual brand (e.g. Bartra et al., 2003). Azoulay and Kapfere's (2003, p. 150) criticism of Aaker's brand personality definition provides an insight to those outcomes: the brand personality is loosely defined as an "all-encompassing potpourri" , therefore, the subsequent works that followed Aaker's conception and measurement scale "shared the same flaw in their conceptual basis". In other words, we do not know what brand personality measures since its construct has never been clearly identified. What constitutes a destination's brand had not been indentified before the measurements of subordinate brand structures were carried out. Konecnik and Gartner (2007) pointed out that much destination branding research applied branding principles before investigating the characteristics of a destination's brand. Similarly, Boo (2006) criticized that the academic destination branding research lacks of systematic investigation of the branding knowledge.

Destination Brand Equity Research

Compared to the studies that focused on applying branding principles to destination context or destination branding case studies, destination branding research has not sufficiently investigated consumer-based brand equity of destinations. A review of current destination branding literature found only four published articles (see Boo et al., 2009; Konecnik & Gartner, 2007; Pike, 2007, 2009) that explicitly investigated consumer-based brand equity. Table 2.3 presents the four articles with their research topic, variables examined, methods and future research recommendations.

TABLE 2.3: Destination brand equity studies

Authors	Title	Research Questions	Variables Measured	Methods	Suggestions
Boo, Busser, & Baloglu (2009)	Multidimensional model of Destination brands: An application of customer-based brand equity	• Variables comprise CBBE, • Variables' relationship	IVs: • DBA • DBI • DBQ DVs: • DBV • DBL	• Survey • SEM	To consider variables not researched in the study but related to destination characteristics To conduct longitudinal study
Konecnik & Gartner (2007)	Customer-based brand equity for a destination	• Dimensions of CBBE, • If DI is the most vital element in DB	• Factors to draw • DBA • DBI • DBQ • DBL	• Content analysis • Free association • EFA • CFA	To examine the causality among dimensions To test the variation of dimension among different target groups
Pike (2007)	Consumer-based equity for destinations: practical DMO performance measures	• Dimensions of CBBE • Hierarchical relations among the dimensions	• Salience • Association • Resonance • Loyalty	• Free association • Repertory grid • Frequency • Percentage	To repeat the same measures in a longitudinal study for brand assessment
Pike (2009)	Destination brand positions of a competitive set of near-home destinations	• Longitudinal re-test of Pike (2007)	• Same as Pike (2007)	Same as Pike (2007)	Identified nine research gaps that need to be filled

Adapting both Aaker's (1991) and Keller's (1993) conceptualizations, Konecnik and Gartner (2007) were probably among the first scholars who investigated consumer-based brand equity of tourism destinations. Konecnik and Gartner's survey instrument

was a close-end questionnaire with 32 items that were mostly based on previous destination image research. They applied this instrument to measure Slovenia's brand equity among visitors from Germany and Croatia. The purpose of their study was to propose this destination brand equity model and test to see whether the brand equity components (i.e. awareness, image, quality, loyalty) adopted from marketing literature are valid for being the components for measuring brand equity.

Konecnik and Gartner argued that destination's name is a brand. When the name is mentioned, tourists start to form mental images about the destination. These images have four dimensions - brand awareness, brand image, brand experience, and brand loyalty.

Konecnik and Gartner also incorporated Gartner's (1993) conception of destination image formation process. Gartner (1993, p. 193) posited that destination image is formed by "three distinctly different but hierarchically interrelated components: cognitive, affective and conative". Cognitive components are internally accepted pictures of destination attributes (e.g. scenic natural attractions); affective components are motives that can be satisfied from visiting the destination (e.g. a person would feel satisfied by visiting the attractions); and conative components are actions and behavior after cognitive and affective evaluations (e.g. a person would like to go to visit those attractions). The formation of destination images follows the sequence of these three dimensions. Konecnik and Gartner stated brand equity is gained when positive conative images are formed. Combining these two conceptions, Konecnik and Gartner stated that brand awareness affects the cognitive and conative component in image formation process, while brand image and brand quality influence more on the affect component of destination image formation. However, their proposed brand equity formation structure

is bit confusing. First, they did not identify between destination image and destination brand equity, which one forms first. Is it that brand equity leads to destination image formation, or destination image comprises brand equity? Second, they did not clarify the difference between the "destination's name induced image" and the "cognitive, affective and conative" destination images. Konecnik and Gartner did not consider brand association as one of the brand equity component.

Konecnik and Gartner used confirmatory factor analysis and higher-order factor analysis structure to test the model's invariance across the two participant groups. They found moderately stable factor structure with slightly invariant factor loadings. Destination brand image and brand quality were the major components that accounted for the most variance in brand equity. These findings suggested that consumer-based destination brand equity may encompass these four components, but the effect of each component on brand equity varies across different market segments.

Boo et al. (2009) also conducted consumer-based destination brand equity research, basing on the Aaker (1991) conceptualization. While Konenick and Gartern's (2007) study aimed at testing the validity of the four equity components, Boo et al. focused on identifying the internal relationship among the different components of the brand equity. Boo et al. posited that the destination brand equity has five components: brand awareness, brand image, brand quality, brand value, and brand loyalty. Noticeably, they did not consider brand association as a brand equity component either. Boo et al. proposed that the first three components are exogenous variables that influence the perception of brand value, the endogenous variable they defined as the perceived "value for money". As to brand image, Boo et al. stated that this concept is multi-dimensional of

various branding constructs, including product attributes, brand personality, and self-concept. Since there was no consensus on how to measure it, they defined brand image as the "social image and self-image of brand personality" (p. 221), and brand loyalty as favorability and intention to recommend. Boo et al.'s created their measurement instrument from related destination image and destination personality studies and contained 21 items, about four items for each brand equity component.

Boo et al. chose Las Vegas and Atlantic City as the study areas and applied their proposed model to compare the model's fit and invariance. Through the testing with the structural equation modeling method, Boo et al. found that the hypothesized model did not hold. Brand image and brand quality were highly correlated. Boo et al. added a latent construct, destination brand experience as the second-order factor, to capture brand image and quality. They proposed that brand awareness affects brand experience. Brand experience then has direct influence and indirect influence via brand value onto brand loyalty. The model's goodness-of-fit was relatively improved, but destination brand experience still failed to predict brand loyalty. Boo et al. however did suggest that a respecification of the destination brand measurement model should be free of established relationships in marketing literature such as image and quality would lead to loyalty.

Pike (2007) proposed four components for consumer-based destination brand equity. The primary purpose of Pike's study was to report a trial measurement of the proposed consumer-based destination brand equity. His proposition is also based on the Aaker (1991) conception. Pike stated that the consumer-based destination brand equity is a hierarchy of four assets: brand salience, brand associations, brand resonance, and brand loyalty. Pike's study asked participants to identify the destinations within Australia they

would like to travel for a short vacation. Pike then defined brand salience as the Top-of-Mind destinations, brand association as "anything linked in memory to the destination" (p. 54) but operationalized as the "perceived performance of a competitive set of five destinations…with cognitive and affective scales" (p.56). Brand resonance was defined as the willingness to engage with the destination, which mirrors Gartner's (1993) conative image formation process. Lastly, brand loyalty, the highest level of the hierarchy, was represented by repeat visitation and word of mouth recommendations. Pike proposed that these components were hierarchically related. However, he did not test the relationships among those components.

None of the destination brand equity studies sufficiently investigated the component of brand association, albeit it is "fundamental to the understanding of customer-based brand equity" (Hsieh, 2004, p. 33). If compared to the Keller description of brand association, Gartner's (1993) image formation process with the three components (cognitive, affective, and conative) could be the closest toward a model of destination branding (Cai, 2002). Cai (2002) pointed out that these three components are similar to Keller's (1993) categorization of brand association that brand associations include attributes, benefits, and attitudes. Attributes are descriptive features of a product or service (e.g. Coca-Cola makes soda); benefits are personal value and meaning attached to the attributes (e.g. Coca-Cola is classic), and attitudes are the overall evaluation and basis for action and behavior (e.g. I prefer Coca-Cola to either Pepsi or Dr. Pepper).

Although the Gartner image formation process is very close to the brand association categorizations, the image formation model cannot function adequately to represent how people make destination brand associations. Cai (2002, p. 724) clearly

stated that “the Gartner framework falls short of linking image formation and components of a destination to a brand identity”.

The review of current destination branding studies shows that the consumer based destination brand equity has been gaining more attention in recent years. Much of the attention has been given on identifying the relationships among brand equity components. However, brand association, the “heart and soul” of consumer-based brand equity, has not been investigated sufficiently, especially from a network perspective.

Summary

This chapter reviewed brand and consumer-based brand equity research in marketing, its application and its current situation in destination branding research. The conceptions of consumer-based brand equity and its components were discussed. The chapter presented empirical studies on consumer-based brand equity measurement in destination branding. It has been noticed that the limited amount of empirical research on consumer-based brand equity research was based on the Aaker conceptualization, and focused on the relationship between different components, especially on their influence on the ultimate goal of creating brand loyalty. Although brand loyalty is the long-term goal of branding, one must begin with perception before moving onto ultimate choice. On the other hand, the Keller conception, which considered brand association from a network perspective and focused on brand association characteristics and structure, has not been fully applied to destination brand equity research.

CHAPTER THREE

CONCEPTUAL DEVELOPMENT

While the review of the tourism branding literature in Chapter Two indicates that consumer-based brand equity has been largely overlooked in destination branding research, marketing and management research has shown that brand equity is a fundamental construct in branding research. Within the limited amount of destination brand-equity studies, most of them focused on relationships between the different components of brand equity. One of the most important measurements for brand equity, brand association – a construct that investigates what exists in the consumers' mind set – has not been given much attention in destination branding research, especially from a network perspective.

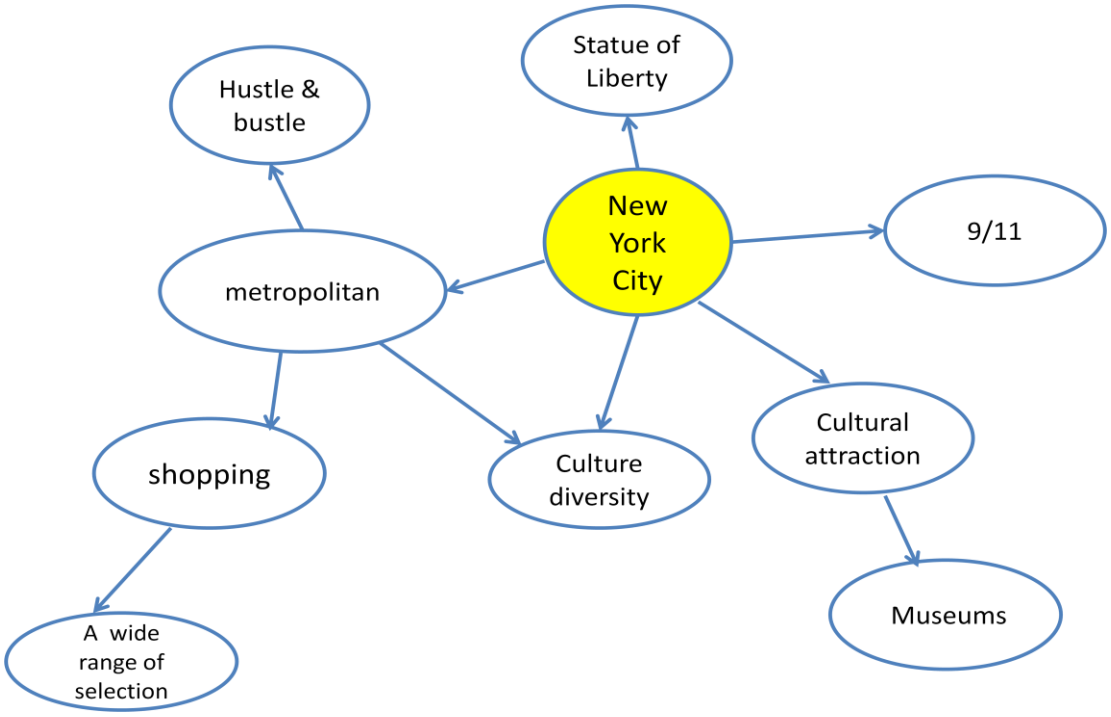
This chapter presents the theoretical foundation and its operationalization in branding research. The chapter is organized into five sections. The first section introduces the Associative Network Theories that the dissertation research is based on. The second section presents repertory grid technique that is used to elicit brand associations in these investigations. The third section discusses network analysis methods and the fourth section illustrates the conceptual framework and flow chart for this study. The chapter concludes with a summary in the fifth section.

Associative Network Theory

Most brand association research is rooted in the Associative Network Theories (ANT), which is concerned with the organization of human semantic memory. Research

on ANT emerged in cognitive psychology in the late 1960s. Cognitive psychologists generally believe that human knowledge is stored in memory and represented as associative networks (Collins & Loftus, 1975). Consider the associative network example of the New York City brand in Figure 3.1.

FIGURE 3.1: Example of the New York City brand network



The associative network is comprised of two elements: node and link between nodes. A node is a unit of information. It represents a concept that can be either an object such as a person, place or thing (e.g. “New York City”), or a proposition such as “New York has cultural attractions”. Association is created when two nodes are connected (e.g. “New York” and “Statue of Liberty”). By their positions around a focal node,

associations can be differentiated as primary and secondary associations. Associations that are centered on a node are called the primary or first-order associations of that focal node (e.g. “cultural attractions” and “metropolitan” are first-order associations around the “New York City”). Further associations built on the primary associations are second-order associations (e.g. “museums”, “shopping” and “a wide range of selection” are the second-order associations to the “New York City” node).

One of the influential ANT theories is Quillian’s (1969) *Teachable Language Comprehender* (TLC) model. Quillian explained how associations are linked within the network. He posited that the associations vary from each other in terms of their hierarchical level in the network. By hierarchical, it is meant that some associations are at a higher level or more basic than others (e.g. “metropolitan” is on a higher level than “shopping” and “a wide range of selection”).

Considering that his model was designed for computer simulating human learning, Quillian put strict rules on the hierarchical orders. He stated that “any unit’s first element must always be a pointer to some other unit, referred to as that unit’s ‘superset’, [and] a unit’s superset will in general represent some more generic concept than the unit itself represents” (p. 462). Quillian original example is used in here to illustrate the hierarchical orders, as they are difficult to understand if illustrated with the New York City example. Quillian exemplified that if JOE-SMITH is a “unit”, then the superset of JOE-SMITH might be a MAN, that of MAN might be PERSON, that of PERSON might be ANIMAL, etc. The strict hierarchical order differentiates the associations based on their level of abstract or inclusiveness, but is difficult in explaining parallel associations (e.g. associations between “cultural diversity”, “metropolitan” and “Statue of Liberty”), or

associations that do not necessarily follow hierarchical orders (say, “New York City” and “Washington DC” if the latter were in the map).

Collins and Loftus (1975) extended Quillian’s (1969) model around the concept of “spreading-activation”. They illustrated how the memory search spreads upon the activation of stimuli. When a person receives a stimulus, a node is activated corresponding to the stimulus. This node soon becomes the focal node and spread the activation to other nodes through the links between them. The search in memory between nodes traces out in parallel along the links from the focal node. Then the activated nodes become stimulus nodes, expanding and spreading the activation. The spreading of activation constantly expands, and the degree of spreading depends on the distance of between the to-be-activated-node to the first stimulus node. Collins and Loftus also eliminated the strict hierarchical structure in Quillian’s model and replaced it with the strength of associations. Strength is represented by the distance of the link between two nodes. The farther the distance is, the weaker the association is (e.g. the “a wide range of selection”-“New York City” association is weaker than “Statue of Liberty”-“New York City”).

Keller’s (1993) conceptualization of brand equity is based on the ANT theory. Especially, his discussion on brand associations reflects the theoretical underpinnings of the ANT theories. Keller differentiated associations into primary associations and secondary associations. The former are those belief associations created on the basis of direct perceptions and experiences with the product or service. The latter are created on the “basis of inferences from some existing brand associations… [and] may arise from primary attributes associations related to the company, the country of origin, the

distribution channels, a celebrity or an event" (p. 11). The secondary associations are not particular to the brand, but refer to independent entities. A person's attitude towards those entities may be transferred to the branded product or service through those secondary associations. Thus, secondary associations are important in that they can either dilute a brand or can be leveraged to create favorable, strong and unique associations that otherwise may not be presented by the brand itself (Keller, 1993). Henderson et al. (1998) suggested that the association between brand and attributes can be considered as first-order association, and attribute-to-attribute associations are considered as secondary associations.

Much of brand association research applying ANTs only stayed on the level of descriptive analysis, such as brand concept mapping and identifying the primary and secondary associations (Henderson et al., 1998). However, this "naïve eyeball" method analyzes only the surface of brand association network, and may overlook the valuable information that is hidden on a deeper level in the network. Note that in Figure 3.1, when the "New York City" brand is presented, the consumer will make primary associations to "cultural diversity" and "metropolitan", and a secondary association to "shopping". It appears that "cultural diversity" is more important than "shopping" as the former is closed related to the "New York City" brand. However, "cultural diversity" does not control the links to any other associations, but "shopping" makes the association to "a wide range of selection", which makes "shopping" an important control node in this brand association network. Using the eyeball method solely may generate illusions that mislead the investigation of important brand associations.

Henderson et al. (1998, 2002) applied network analysis methods to brand associative network. The network analysis methods so far are largely used in social network analysis. Nevertheless, the basic concepts between associative network theories and social network are similar. Henderson et al.'s methods add strong analytical power into the analyses of sophisticated brand-to-association networks, as well as brand-to-brand, and association-to-association networks.

One may notice that not many branding studies conducted network analysis methods after Henderson et al.'s works. This may be largely because of the lack of appropriate computational tool for network analysis. van Dujn and Vermun (2006) noted that the increase of social network research emerged around 2005 as a result of the increase and advance of social network software that can handle complex networks. Nevertheless, more marketing researchers (Henderson et al., 1998, 2002; Keller, 2003a; Keller, 2008; Lawson, 2002; Teichert & Schöntag, 2010) have come to agreement that associative network models are suitable for studying knowledge structures.

Before analyzing brand association, one must first obtain brand associations. The following section discusses the brand association elicitation method that was used for this study.

Repertory Grid Technique

Repertory Grid Technique is an interpretive research method that aims at extracting personal meanings about objects of research interest. Repertory grid technique is based on Kelly's (1955) *personal construct theory.* Consistent with the interpretive paradigm, personal construct theory holds that a person's understanding of the world is

the result of a constructive process of contrast and similarity rather than a passive reaction to external realities (Marsden & Littler, 2000). Kelly termed the process of contrast and similarity as "construing". Eden and Jones (1984, p. 779) explained the construing process that "we construe situations by seeking to differentiate them from others and see them as similar to others; it is only through such a process that we give meaning to events, that they have significance". Similar to other interpretive diagrams, personal construct theory has been accused of focusing on the individual's subjective consciousness and being "solipsistic" (Marsden & Little). The response to that accusation is that personal construct theory in fact avoids "solipsism". The theory maintains that people are similar not because they have identical experience, but rather because they construe their experience in a similar way (Marsden & Little).

The interpretive paradigm and theoretical underpinnings in fact respond to the marketing research emphasis on "seeing the voice of the consumer" (Henderson, 1995). The theoretical underpinnings also match the research purpose of the current study: to identify the underlying dimensions of associations that people use to describe destination brands. Thus, repertory grid technique is an appropriate method for this study to elicit brand associations.

A repertory grid contains two main components: "element" and "construct". An element is the object that is the focus of the research, which can be a person, a place, or any phenomena that the research concentrates on. A construct is defined as "a way in which things are connected as being alike and yet different from others" (Kelly, 1955, p. 105). Thus, a construct is revealed through the process of contrast and similarity that people make among the elements given to them to assess. For instance, using the example

in Figure 3.1, in a repertory grid investigating brands, New York City, and other destinations (e.g. Washington DC and Los Angeles) are "elements". While there is no association can be correctly used to illustrate a construct here, suppose "metropolitan" were also connected to "Washington DC" and "Los Angeles", and is a construct of these three destinations.

There are several ways to extract the elements and constructs. The elements in the repertory can be either supplied by the investigator or elicited through discussions as in interviews or focus groups. When the constructs are prepared by the investigator (usually known as the rating grid), however, it is reminiscent of the traditional multidimensional scaling method and removes the benefits of the freedom of qualitative elicitation (Henderson 1995). For instance, Wooten and Norman (2008) used rating grid method to study visitors' personal meaning of attending the Kentuck Festival of Arts. They provided the measurement constructs and elements and asked the respondents to evaluate each element by rating their personal fitting on the corresponding constructs. Wooten and Norman acknowledged that the rating grid added the ease in data collection, but could also overlook the elements that are important to the respondents. They recommended allowing respondents to generate their own personal constructs and elements through in-depth interviews, and then using the interview results to inform the development of a rating grid for large quantitative data collection.

Triadic method is the most common approach used in repertory grid to elicit constructs because it matches well with the construing idea of comparing similarity and dissimilarity (Marsden & Littler, 2000). With this approach, the subject is presented with three elements (a triad), such as the names of people or places, and asked to specify in

what way that the two elements are alike and in what way the third is different from the other two (i.e. the constructs). For instance, participants say "New York city and Los Angeles are alike because they both have large scale metropolitan areas than Washington DC". Then "large scale metropolitan" is an elicited construct. Hankinson (2005) used triadic method to elicit destination images of 15 cities in the UK from a business tourist perspective and generated a total of 246 different images. He suggested that using repertory method placed as few constraints as possible on the way in which respondents communicate their views and avoided the imposition of pre-determined attributes in the form of Likert and semantic differential scales.

Depending on the research goals, triad elicitation sometimes combines "laddering method" to elicit more abstract values associated with the constructs. Laddering method asks participants which "pole of the construct" they prefer (using sportswear brands as examples here and below, whether participants prefer expensive or inexpensive tennis shows), and why it is important to them (e.g. participant may feel that expensiveness is an assurance of quality, or may prefer inexpensiveness because limited budget). However, probing into deeper meaning of brand associations is not the intention of the current study, which focuses on top-of-mind evaluations. Also abstract meanings elicited are unnecessarily specific to the brand (e.g. if a person believes expensiveness assuring quality, then this construct is not specific to Nike or Reebok brands, but also applies to his or her attitudes towards the Sony brand vs. low profile brand electronics).After eliciting brand associations of destinations, the study analyzes them with network analysis methods.

Network Analysis Method

Henderson et al. (1998) applied network analysis methods to associative memory network models, which added more power and sophistication to analyze branding effects. Their investigation focused on the measurement and structure of brand association networks. They identified three types of brand networks analyses: analysis of brand association network, analysis of brand to brand network, and analysis across brand association networks. Using network analysis method provides the advantages that cannot be achieve with simply eye-ball analysis methods. First, network analysis can analyze how people make brand associations by identify the relationships among different brand associations and finding the important associations that control the recall of other associations. Second network analysis method offers applicable managerial information for brand management. Henderson et al. (1998, pp. 315-317) listed 10 possible managerial issues that can be answered using network analysis methods:

1. Branded feature – what features of my brand are perceived by consumers to be the most important?
2. Driver brands – is there some brand in my company portfolio that also attracts customers and drivers them to purchase other brands?
3. Complements – what complementary combination of features might be leveraged best for the ultimate success of the brand and firm?
4. Co-branding – what other brands exist that might be a good candidate for co-branding?
5. Cannibalization – How can we minimize cannibalization in our product portfolio?

6. Brand parity – how can I assess consumers' perceived parity between my brand and its competition?
7. Brand dilution – is my brand's equity in jeopardy of being diluted if we were to introduce a brand- or line – extension that is not congruent with my existing brand image and positioning
8. Brand confusion – to what extent is there brand confusion in the consumers' perception of the competitive field?
9. Counter-brands – what are the brands consumers are most likely to choose as alternatives to the market leader brand? And
10. Segmentation – how can the market be segmented to take advantage of the existing perceptions of consumers with respect to my brand relative to other brands?

Teichert and Schöntag (2010) offered similar discussion on the insightsthat network analysis can provide for brand management. They demonstrated that brand association analysis can be studies at three levels: node level, group of nodes level, and network level.

Node level analysis deals with the measures of "mentioning probability, "net degree", "average tie strength", "eigenvector centrality", "unique nodes", and "cut points". These measures provides the insights to answer short-term brand management questions such as salient branded features, brand differentiation, and the probability of activation of an associations. These questions are equivalent to the managerial issues of "branded features" and "driver brand" in Henderson et al.'s (1998) study.

Group level analysis focuses on using ego networks (also known as sub-networks) analysis to provide implications for mid-term brand management. An ego network is "a group of nodes that contain one central node and all of its directly linked neighbor nodes" (Teichert & Schöntag, 2010, p. 380). This level of analysis identifies the congruence of brand associations, referring to the "extend to which a brand association shares content and meaning with another brand associations" (Keller, 1993, p. 7). This question addresses the similar issues of "brand cannibalization", "co-branding", and "brand complements" in Henderson et al.'s (1998) study.

Network level analysis concentrates on the holistic view of the network and comparison between networks. The measures at this level of analysis include "number of nodes", "average number of mentions", "network density", "average tie strength" and "average geodesic distance". Analysis at this level can provide insights for long-term brand management such as the consistence in brand image, brand image richness, and also the managerial issues such as "brand dilution", "brand parity" and "counter brands" that Henderson et al. (1998) addressed in their study.

Although it is important for this study to provide practical implications, analyzing all ten issues list above is beyond the scope of this study. Furthermore, the primary goal of the study is to understand how people make associations and the relationships among associations. Thus this study focuses on the analysis methods that can be used analyze the structure of brand association network than focusing on answer each question above for practical implications. Because once the relationships are identified, the managerial implication can also be interpreted accordingly. In reference to Teichert and Schöntag's

(2010) classification of levels of analysis, the measures and analyses of brand association in this study are also limited to the node-level instead of looking at all three levels.

The focus of this study is the notions of centrality and cohesion as the indices to measure the relationships of brand associations. By measuring the relative location of a node within a network, centrality measurements determine the relative importance of this node within the network (Knoke & Kuklinski, 1982; Knoke & Yang, 2007). Cohesion is a measure of the subgroups within the network. It provides the implication as to what brand associations are complementary to each other. Centralities can be measured through mathematical formulas based on graphic-theory, while cohesion analysis is identified by counting the mutual connections between nodes. When most nodes are mutual connected (also known as the clique), the cohesion exists among these associations (Knoke & Yang, 2007; Wasserman & Faust, 1994).

There are three types of centrality: degree centrality, betweenness centrality, and closeness centrality. Henderson et al. (1998) provided the formulas to calculate and examples to illustrate.

Degree centrality

Degree centrality is the number of other points that have a direct tie to that node. A node with high degree centrality is more likely to generate more immediate associations. Degree centrality is computed as

$$\mathrm{C_D}(p_k) = \sum_{i=0}^{n} \mathrm{a}(\mathrm{p_i}, \mathrm{p_k})$$

Where,

n is the number of nodes in the network

$a(p_i, p_k) = 1$, if and only if p_i, and p_k are connected by a line, or = 0 otherwise. Degree centrality of a node controls the communication activities through that particular node (Freeman, 1979). A node with high degree centrality can influence the network by withholding or distorting information in transmission (Freeman, 1979; Knoke & Yang, 2007). For instance, in Figure 3.1, the node "New York City" has the degree centrality of five, while "museums", "hustle and bustle", "Statue of Liberty", and "9/11" each only has one degree centrality.

Betweenness centrality

When a node is connected through multiple paths, betweenness centrality represents the probability of a node being activated using a particular path. It reflects the likelihood that some node will be activated as associations spread throughout the network (Henderson et al., 1998). The formula for betweenness centrality is:

$$C_B(p_k) = \sum_{i}^{n} \sum_{j}^{n} b_{ij}(p_k)$$

For all $(i < j) \neq k$, and where,

$$b_{ij}(p_k) = \frac{g_{ij}(p_k)}{g_{ij}}$$

and

$g_{ij}(p_k)$ = the number of geodesics linking p_i and p_j that contain p_k

g_{ij} = the number of geodesic paths from point *i* to point *j*

A geodesic is the shortest path(s) between two pairs of nodes.

In Figure 3.1, the node "museums" is not between any pairs of associations, so it has a zero degree of betweenness centrality. "metropolitan" is between the nodes of

"New York City", "shopping" and "a wide range of selection" indicating that the betweenness centrality of "metropolitan" is higher than that of "museum". It makes sense that because "metropolitan" controls the path between "a wide range of selection" to other nodes.

Closeness centrality

The third type of centrality is closeness centrality, which measures how close a node is to the other nodes. It is also a measurement of control. However, closeness centrality differs from between centrality in that it measures to what extent a node can avoid the control of others in the network. In other words, closeness centrality represents the independence of a node from the control of other nodes in a network. The more independence, the more efficiently a node reaches its related nodes. The formula to compute closeness centrality is:

$$C_c(p_k) = \left[AVG(\sum_{i=1}^{g} d(p_i, p_k)) \right]^{-1}$$

where,

$d(p_i, p_k)$ = the number of paths in the geodesic linking p_i and p_k

In Figure 3.1, the nodes "metropolitan", "shopping", "cultural diversity", and "cultural attraction" all have two direct links in the network. However, "metropolitan" is surround by high dense of links, which makes it closer to the majority of the nodes in the network than the other three nodes.

These three centrality indices are distinctive measures. They together provide a helpful tool for identifying central nodes that are important in consumers' associative network of the brand.

Cohesion

Centralities focus on individual nodes within the network, while cohesion identifies whether subgroups exists within the network. The primary measure for cohesion within networks is clique. Although there is widely accepted unique definition of what a clique is, it is usually defined as a group of nodes that densely related (Wasserman & Faust, 1994). A perfect clique is a subgroup that consists of three or more nodes and in which all nodes are mutually connected with each other (Henderson et al., 1998). In branding, a clique represents the features with the strongest mutual associations. When consumers think of one of the association, they almost automatically think of another.

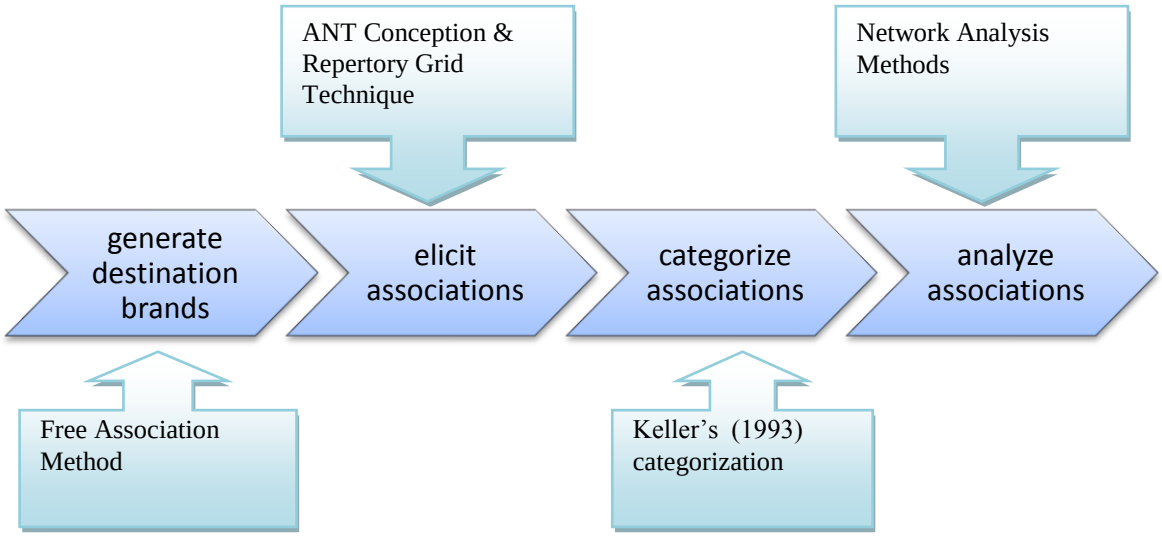
Proposed Conceptual Framework

Based on previous discussion, tourists may retrieve the knowledge of a destination stored in memory upon the stimulation of the brand. To identify the brand association in the consumer-based brand equity of a destination brand, the associative memory theories provide the theoretical framework for this dissertation research.

Based on the identified associations, this dissertation study looks further to identify the relationship among the brand associations. The interpretation of brand association is also an indication of branding effect, which is considered as the consumer-based brand equity. This dissertation study employs Henderson et al.'s (1998, 2002) methods and

focuses on the centrality and cohesion issues of the brand associations. Figure 3.2 visually presents the flow chart of the conceptual framework of the study.

FIGURE 3.2: Flow chart of the conceptual framework



The first task of the study is to generate appropriate destination brands for brand association elicitation and analysis in the next stages. Those destination brands shall be familiar to the study participants. The method of generating destination brand is free association method which allows participants to freely offer their destination choice based on given criteria. Then the next stage is brand association elicitation, in which the ANT conception and repertory grid methods are used. After the brand associations have been elicited, the study use Keller's (1993) categorization to classify the types of those brand associations and network analysis method to examine the structure of the brand association map and the relationships among those brand associations.

Summary

This chapter introduced the theoretical framework of the study, and discussed its application in branding research. The chapter also reviewed the method used in eliciting brand associations, as well as the network analysis methods that focus on the structure within the brand association network.

CHAPTER FOUR

RESEARCH METHODS

This chapter discusses the procedures that were used to conduct this study. The chapter is divided into five sections. The first section describes the destination selection for this research. The second section presents the selection of study participants. The development of the research instrument is the focus of the third section. The fourth section explains the analytic methods employed to solve the research questions. Finally, the fifth section provides a summary of the chapter.

Because the network analysis method has not been widely applied in published destination branding research before, it is important to conduct thorough pilot tests to examine the methods' applicability. Therefore, the study uses the next chapter to present the pilot test procedures and findings.

Selection of Destinations

Destinations vary in terms of their geographical locations, major attractions, services provided, typical user images, and seasonality. The current study focused on one type of destinations because including a range of destinations in the study may lead the participants to concentrate on the similarities and dissimilarities of destination's type rather than the destination brand association itself. For instance, a comparison between New York City and Yellow Stone National Park is likely to result in a comparison between urban and natural environments. While a comparison between New York and Los Angeles is more likely to focus on the cities themselves.

Cook, Yale and Marqua (2008) categorized six types of destinations based on seasonality and level of development. They are “links to the past”, “far from the maddening crowd”, “seasonal delights”, “spotlight on sporting activities”, “year-round playgrounds”, and “bright lights and city sights”. Cook et al. suggested that “seasonal delights” and spotlight on sporting activities are the most common vacation destinations for most people. Examples of this type of destinations include seaside resorts, and golf resorts. To identify the dimensions of a destination’s brand associations, the destination’s brand must be familiar to the participants in the study. Furthermore most destinations may have multiple resources to cater various vacation needs, and also a tourist may take a vacation for multiple reasons. Consequently, asking a person to compare multiple destinations without a context would leave the participant a too large scope to have a focused discussion. As discussed earlier, golf resorts and activities are common vacation activities for many people, thus the study decided to use typical golf vacation destinations for the settings of this study.

Based on Kwon’s (2003) research on the tourists’ choice of typical destinations under different situational factors, the current study used her method of generating representative destinations among the seaside destinations on the US east coast. Her selection method for generating example destinations is largely based on top-of-mind awareness. To generate example destinations, Kwon gave participants a vignette first and then asked them to list as many typical destinations fitting the vignette context as possible. Adapting Kwon’s method, the study provided the instructions to the participants:

> This study has to do with what we have in mind when we use words, which refer to categories. Let’s take the word red as an example. Close your eye,

> and imagine a true red. Now imagine an orangish red. Imagine a purple red. Although you might still name the orange-red or the purple-red using the term *red*, they are not as good examples of red (i.e., as clear a case of what red refers to) as the clear true red. In short, some reds are redder than others. The same is true for other kinds of categories. Think of dogs. You have some notion of what a real dog, a doggy dog is. To me a retriever or German Sheppard is a very doggy dog while a Pekiness is a less doggy dog. Notice that this kind of judgment has nothing to do with how well you like the things; you can like a purple-red better than a true red but still recognize that the color you like not a true red. You may prefer to own a Pekinese without thinking that it is the breed that best represents what people mean by dogginess. On this form, you are asked to provide examples of a category for *top destinations with golf resorts* [this part is adjusted for this study]. Don't worry about why you feel that something is or isn't a good example of the category. And don't worry about whether it's just your or people in general who feel that way. Just provide names the way you see it (Kwon, 2003, p. 100).

The reason of adding "golf resorts" here and "golf vacation" in the next stage of brand association elicitation was to put the brand selection in context. Fransella, Bell and Bannister (2004) suggested that constructs differ in the way they are used in different context. They pointed out that contextual confusion can give rise to implicative dilemmas and conflict that can cause low construct interrelationships or ambiguous implication interaction. Backman (1994) also suggested that tourists usage of destinations are person-situation specific. She found that benefits sought by visitors were significantly different by season, usage of different tourist resources within one destination, and different locations within the same destination. Thus, putting the destination brand evaluations in context minimizes ambiguous interpretations.

After the destination names had been collected, the investigator chose the four most frequently mentioned destination names to elicit brand associations. Ideally, it would be more representative to include all destinations elicited for the next phases of brand association elicitation and network analysis. However, as the number of destination

brands increases, the number of possible triad combinations of brands increases substantially:

$$C_N^3 = \frac{N!}{3!\,(N-3)!}$$

Where N = the total number of destination brands

Having the amount of the combination of three would inevitably cause participants to evaluate a destination repeatedly whenever it shows up in a combination. The repeat evaluations and large amount of tasks could make the elicitation tedious and strenuous for the participants.

Study Participants

The study recruited students in the professional golf management (PGM) major at Clemson University as the study participants. Petrick and Backman (2002a) pointed out that golf has evolved into a major industry in the United State in the late 1990s. The National Golf Foundation (2010) reported that the total size of US golf economy in 2005 was %75.9 billion; 28.6 million golfers played in the US in 2008; as of January 1, 2010, there were 15,979 golf facilities in the US, 11,637 of which were open to the public. The golf game attracts affluent class society who generates above-average per capita revenues for the destination they visit (Shani, Wang, Hutchinson, & Lai, 2009). The golf travel market has gained increasing attention in tourism research (see Kim, Chun, & Petrick, 2005; Petrick & Backman, 2002b; Petrick, Backman, Bixler, & W.C., 2001; Shani et al., 2009). Aside from the growing importance of golf traveler market, the study also recognized the expertise that PGM students have. The PGM classes at Clemson offers a

series of class covering from golfing skills to golf course management. It is logical to consider that in general that the PGM students have more knowledge than average students of non-PGM majors. Mitchell and Dacin's (1996) research showed that consumers' expertise in a product significantly increased the breadth and depth of their brand association network, creating more complex structures than those of the consumers with less knowledge in the product. Thus, having the PGM students as the study subjects could achieve a large number of brand associations and provide more insightful evaluations for the destination brands than using participant with little knowledge in the golf tourism area.

It could be argued that a heterogeneous sample may represent a higher level of generalizability, however, heterogeneity increases the error variance, declines the preciseness in analysis and makes results surface only on the general level (Calder, Phillips, & Tybout, 1981). Backman (1994) suggested that tourism market segmentation should be personal-situation specific. Although the trade off of using a student sample is the lack of generalizablity to a heterogeneous population, the homogenous sample helps to reduce measurement error and improve the analysis accuracy of the study population (Calder et al.).

The sample size for the current study depends on when the data reach saturation. Considered as a qualitative data collection method, the past repertory grid analyses in both the marketing and tourism fields have typically been small and most studies did not mention how they determined their sample size (Naoi, Airey, Iijima, & Niininen, 2006). Pike (2003) found that destination studies, using repertory grid, have sample sizes from one person to 25 people. Naoi et al. (2006) suggested that a large sample for repertory

grid elicitation is probably unrealistic because each interview is usually around 40 to 60 minutes. The current study chooses the data saturation point as the cutoff point for data collection. That is, the interview stops when no new constructs are elicited.

Instrument Development

This study developed two research instruments in accord with the research design. In the first phase, the questionnaire was designed as an adaption of Kwon's vignette. After the vignette, the participants are asked to write down the destination names on an attached paper (see Appendix A for the survey questionnaire).

In the elicitation phase, the instrument applies repertory grid method to elicit brand associations. Because four destinations were chosen for eliciting brand associations, there were four combinations of triads. On presentation of each triad, the participant was asked: "Think about what you know or have heard about these three destinations. If your friend was seeking your advice for a golf vacation at a seaside destination, in what way do you think two of the destinations are alike, and how the third destination is different from the other two?" Upon finishing the comparison, the participants were asked for their demographics and the number of their previous golfing trips to the four destinations (see Appendix B for the interview instrument).

Brand-Construct Matrix Conversion

After eliciting brand associations, there are three types of matrices that can be generated from the repertory grid. To avoid confusion, here the brand association is referred to as the "construct". The three types of networks are destination-to-construct

matrix, construct-to-construct matrix, and destination-to-destination matrix. The coding for these matrices follows Henderson et al.'s (1998) methods. The destination-construct network can be generated directly off the grid. A destination associated to a construct is marked with a "1" to indicate the existence of this association. If the association does not exist, a "0" is marked. Table 4.1 presents an example of the relationship coding.

TABLE 4.1: An example of coding brand-construct relationships

	Destination A	Destination B	Destination C	Destination D
Construct 1	1	0	0	1
Construct 2	1	1	1	0
Construct 3	0	0	1	1

In this example, construct 1 is associated to destinations A and D; construct 2 is associated to Destinations A, B and D; construct 3 is associated to destinations C and D.

To convert this brand-constructs matrix (i.e. repertory grid matrix) into brand-to-brand and construct-to-construct matrices, the above matrix is decomposed and restructured into raw Sums-of-Squares and Cross-Product (SSCP) matrices. As the formulas for SSCP are the same for transforming the matrices, the following formulas' illustration uses transforming brand-to-brand matrix as the example. The sums-of-square formula is

$$u_{ii} = \sum_{k=1}^{n} Y_{ki}^2$$

Where, *i* refers to destination brand *i*

k = the index of the constructs brand *i* has

Y = 1 if brand *i* has construct *k*

u_{ii} = sum of square of brand *i*

The formula for calculating the sum of cross products is:

$$u_{ij} = \sum_{k=1}^{n} Y_{ki} Y_{kj}$$

Where, *j* refers to brand *j*

Accordingly, Table 4.1 can be transformed into the brand-to-brand matrix (Table 4.2). In the new matrix, the sums-of-square values are located on diagonals, representing the total number of constructs associated with destination brand *i*. The off diagonals are the sums of cross product, representing the number of constructs shared by both destination brand *i* and brand *j*.

TABLE 4.2: Brand-to-brand matrix

	Destination A	Destination B	Destination C	Destination D
Destination A	2			
Destination B	1	1		
Destination C	1	1	2	
Destination D	1	0	1	2

After converting generating all brand-to-brand and construct-to-construct matrices, the network analyses can be conducted at the individual participant's level. Brand association maps can also be created accordingly. However, the individual level analysis may offer limited implications as it only reflects an individual's view. An aggregated level of analysis may reflect the shared views of destination brand assoiations among this study population.

To produce an aggregated matrix, each of the individual brand-to-construct matrices is dichotomized. The formula for transferring each cell from individual matrices is:

$$u_{ijp} = \sum_{p} Y_{ijp}$$

Where, Y_{jip} represents each cell in brand-construct (repertory grid) matrix,

i = the index for constructs,

j = the index for destination brands,

p = the index for participants

At the aggregated-level, the three types of associations can be aggregated into one matrix. Depending on the number of participants and constructs that could be elicited, producing one holistic network, with all three types of associations, may not be desirable because such a matrix can include a substantially large amount of associations (i.e. nodes in the network), making the interpretation very difficult. If a large amount of data points exists, it is clearer to interpret the aggregated data at component matrix level, i.e. brand-to-brand, construct-to-construct, and brand-to-construct.

The network analysis methods explicitly examine the structure of the brand concept map. The mathematical formulas for calculating three types of centrality are discussed in the previous chapter – Conceptual Development. The cohesion measure is descriptive in nature, and can be measured by counting the presence of cliques. A clique is formed when there are at least three brand associations (nodes) that are mutually connected to each other.

There is some network analysis software available on the Internet. The study used two software programs for this study. One is Cytoscope, which is free for download. The other is UCINET, which grants a 60-day trial period and relatively inexpensive price for students. Cytoscape has a better visual presentation of the network than UCINET, but requires add-on software to run network analysis. UCINET has an abundant amount of network analysis functions. The study used the two pieces of software to create visual network and cross validate the results.

Summary

This chapter focused on the research method used in the study. The chapter first discussed the justification for the selecting of destinations and study participants. The chapter then explained the instrument development. Then, the methods for aggregating and analyzing destination brand associations were introduced.

CHAPTER FIVE

PILOT TESTING

This dissertation study explores the feasibility and applicability of using network approach to examine destination's brand, for such a method has never been tested in tourism research before. A thorough pilot study was conducted to analyze the clarity of the scripts, examine the applicability of the repertory grid method, and to test the feasibility of the network approach. This chapter describes the procedures used in the pilot testing, presents the results from the pilot testing, and rationalizes the modifications made afterwards.

Survey for Typical Golf Vacation Destinations

The pilot tests were conducted in late January and early February 2010 after receiving the IRB's approval. As stated in the previous chapter, the research was designed in two stages: surveys and interviews. During the survey stage, the task was to generate typical golf vacation destinations. The pilot test collected 29 responses from a non PGM class at Clemson University. Most participants in this pilot testing has no or very limited golf experience: twenty people reported that they had never played golf in the past 12 months; eight people reported that they had played once or twice in the past 12 months; and only one person said that he played more than 10 times in the past 12 months.

Participants in the pilot testing listed 22 destinations they considered as top choices for a golf vacation. The mostly mentioned four destinations were: Myrtle Beach,

South Carolina; Augusta National, Georgia; Hilton Head, South Carolina; and Pebble Beach, California. Table 5.1 lists the frequencies of these 26 destinations.

TABLE 5.1: Destinations yielded from the pilot testing survey

Destination	Frequency	Destination	Frequency
Myrtle Beach, SC	24	Palm Springs, CA	3
Augusta National, GA	22	Valley Ranch, Dallas, TX	3
Hilton Head, SC	21	Atlanta, GA	3
Pebble Beach, CA	15	Jacksonville	2
The Cliffs	11	Bethpage Black, Farmingdale, NY	2
Kiawah Island, SC	9	Torry Pines, CA	2
Wild Dunes, SC	9	Wade Hampton, Cashiers	1
Clemson, SC	7	Amelia Island, FL	1
TPC Scottsdale AZ	7	Kauai Islands, HI	1
TPC Sawgrass, FL	7	orlando, FL	1
Pinehurst, NC	3	Tampa, FL	1

The pilot testing revealed that a few participants used private golf club brands as the vacation places rather than a destination's name. A private club such as the Augusta National requires exclusive membership that it is likely not accessible to most vacationers. A golf club's brand, without being given a specific location, makes the research focus deviate from describing the location to describing the club. To correct this problem, the scripts were revised to bold the word "vacation". Another paragraph of instruction was also added to clearly state the exclusion of private clubs:

> *Please, write down the names of destinations including states, but not club names or resorts. If you feel that a destination is on your top list because of certain clubs, write down the destination first, then the club(s). Please, do not repeat a destination simply because of different clubs in that location. Destinations considered mainly for private clubs shall NOT be included in your list.*

Six graduate students of the tourism major with English as the mother tongue read the new scripts and confirmed the emphasis was on vacation with golf experience, rather than on listing well-know club names.

The study took out the private clubs in the frequency ranking and chose the four mostly mentioned destinations as the research locations. These four destinations were: Myrtle Beach, SC (MB); Hilton Head, SC (HH); Pebble Beach, CA (PB); and Kiawah Island, SC (KI).

Destination Brand Elicitation and Modification of Analysis Methods

Seven students in the survey stage indicated that they would participate in the interview. However, only five students responded and scheduled for the interviews. The interviews with the five students were then conducted one week after the survey. Based on the four destinations selected, four triad cards were created with each one having a combination of three destinations. The investigator presented the cards one at a time to the participant and asked him or her in what way the two destinations were similar and the third one was different. Each interview lasted five to eight minutes.

Follow Henderson et al's (1998) step by step rules of brand – association matrix conversion, the pilot study did not yield interpretable results. The brand – brand matrices and association – association matrices obtained from mathematical conversions created linkages between almost every pair of nodes.

The reasons causing these problems lay in the SSCP conversion, which mathematically creates a direct link between two nodes as long as there is at least one node mutually connected to the two nodes. The SSCP conversion is mostly used in

network studies of inter-organizational relationship(Burt, 1980). Breiger (1974) instructed that two criteria that must be met for SSCP to be valid are symmetry membership and transitivity. He explained that symmetry membership is a mutual connection between person *a* and *b* if they have a shared membership. However, whether to assign this symmetry relationship is "a fundamental theoretical issue, not a technicality of computation" (Breiger, 1974, p.184). Transitivity requires that "two nodes must be mutually 'reachable' along the path of length *n* if there exists a sequence of *n* contiguous ties between them" (Breiger, 1974, p. 185).

Considering these drawbacks and difficulties in data analysis and results interpretation, the study did not use SSCP conversion to generate second-order associations, but used the laddering technique with the repertory grid method to elicit second-order associations. Detailed SSCP conversion steps, analysis methods and results interpretation were discussed as Appendix C.

Revised Pilot Testing with Laddering Technique

Laddering

Laddering is a technique that identifies hierarchical relations between attributes, evaluations and higher levels of abstract mental states (Fransella et al., 2004). This technique is often used with repertory grid method to extract associated constructs. The investigator first uses triad card and asks participants to compare the similarities and dissimilarities among three objects. After they provide the response, laddering technique follows. This technique can be either laddering up or laddering down. Laddering up is

used to elicit abstract ideals from concrete attributes by asking the respondents to choose whether or not they prefer the concrete association they just said and explain why. Laddering down – sometimes called pyramiding – works the opposite way to elicit concrete attributes from abstract ideals (Marsden & Littler, 2000; Naoi et al., 2006). Marsden and Littler (2000) provided examples of the laddering up and down technique:

> When asked how the services in restaurant, newspaper, and shoe stores are alike and different, if the participant answers that good staff service is important for the restaurant and shoes but not for newspapers…then the laddering [up] method can be used which involves asking the participant which pole of the construct they prefer and why it is important to them (e.g. "Good staff service lets you browse, really decide, not make spur of the moment decision"). Conversely, the concrete benefits associated with each construct can be elicited using the pyramiding method [laddering down] involving asking the participant what defined their preferred construct pole (p. 823).

The investigator decided only to use laddering down to elicit concrete constructs when the participants answer an abstract or less concrete construct (e.g. what makes good staff?). The rationale was that the participants were given the task to compare the destinations without having to making a final choice destination for golf vacation. If the investigator asked them why a specific construct was important, then this question can force the participants to put user and usage situations into consideration, in relation to t in order to formulate a judgment. While user and usage situations, and personal income levels are critical factors in shaping buying decision making, these factors were not the concerns of this study and would add complexity to the data structure.

This laddering process is similar to the means-end chain approach, which seeks to understand the meanings that people associate with production consumption (Klenosky, 2002). A product and the attributes it has are the "means" in consumption process. The outcomes such as benefits and personal values from consuming the product or a service

are the "end" of the consumption. Consequently, means-end chain focuses on categorizing the relationships between the behavior and its objects (Goldenberg, Klenosky, O'Leary, & Templin, 2000). Gutman (1982) developed the means-end theory and suggested three levels of "end" meanings associated with consumption: attributes, consequences, and values. Attributes are the concrete characteristics associated with a product. Consequence refers to the benefits and risks associated with consuming a product. Values are highly abstract and positive consequences. Gutman suggests that these three levels are hierarchical. Thus the means-end chain approach inevitability assumes that the relationships are strictly hierarchical and directional. However, some researchers (Scholderer & Grunert, 2005; Teichert & Schöntag, 2010) questioned that the hierarchicity may not be correct, and the spreading of "end" meanings may be much more complex that the hierarchical relationship.

Study Participants

To test the laddering technique's applicability for this research, the investigator contacted the two students David and Emily (both are pseudonyms), who agreed to participate in the interview, but did not respond to the first invitation email. This time they both responded and agreed to participate. The two interviews were conducted in mid February, 2010. David played golf in Myrtle Beach once during the past 12 months, but had never played in the other three places. Emily had never played golf but had heard about all four destinations. However, she was not quite familiar with Pebble Beach and Kiawah Island compared to her knowledge about the other two destinations. .

Interview Method

The two interviews used the same four destinations and then asked the participants to contrast and compare the similarities and dissimilarities among a group of three destinations. After a participant offered his or her answer, the investigator asked a laddering question to extract relations between constructs. Table 5.2 uses a section of the interview with David as an example to illustrate the interview recoding process. The constructs that the participant directly spoke of were considered as the first-order component and marked a 1 to indicate the presence of that construct and the specific destination. The constructs that were laddered were considered as the second-order constructs of that first-order construct, and marked with a "-1" to indicate that it was associated with that destination, but also laddered from the first-order construct. During the interview David said Pebble Beach and Kiawah Island were similar because they both were upscale destinations. Then upscale destination is the first-order association and marked with 1s below Pebble Beach and Kiawah Island. Then the laddering question followed to ask what made them upscale destinations. David answered that they both had upscale golf course facilities, the players at both location most likely were wealthy, and the two places hold PGA tours and the US Open tours. These three constructs were marked with a "-1" under "upscale destinations". David continued comparing the similarities and dissimilarities and stated that Pebble Beach and Kiawah Island were also similar in that they neither of them seemed like a family vacation place (first-order), because golfing was probably the only activity there (second-order), and there were no other activities suitable for family time (second-order).

TABLE 5.2: Example of marking first and second order constructs

Constructs	MB	PB	KI
Upscale destinations		1	1
Upscale golf course facilities		-1	-1
Wealthy clientele		-1	-1
PGA/US Open		-1	-1
Not a family vacation place		1	1
Exclusive in golfing		-1	-1
Lack of family activities		-1	-1
Famous	1	1	
Golf Capital of the World	-1, 1		
Upscale destination		-1	

When a second-order construct laddered was unique to a specific location, a direct link between this construct and the destination was added to make this construct both a first-order and second-order construct. For instance, David said that Myrtle Beach and Pebble Beach were similar in that they both were famous. When asked what made the two places famous, David answered that "Myrtle Beach is known as the Golf Capital of the world and Pebble Beach is just so famous because of the upscale stuff like I said before". Consequently, although Golf Capital and famous were all second-order to "Famous", direct links were added between "Golf Capital" and "Myrtle Beach" (marked as -1, 1), and "upscale destination" and "Pebble Beach". There is no need to add a direct link on the latter relation for it has already been elicited as a first-order association previously in the interview. The reason for adding direct links is to constrain those constructs to their specific location, so that the powers of "famous" that would be otherwise increased by false linkages such as "Myrtle Beach – famous –upscale destination" can be removed. Figure 5.1 presents the flowchart to determine the marking of second-order associations.

Using the Microsoft Office Excel Spreadsheet, the investigator was able to separate the first-order constructs by replacing all values less or equal to 0 with 0s. First, it was needed to set all the values in the matrix as "text" than "number". Second, using the formula *IF(CELL="-1,1",1,IF(CELL="1",1,0))*, the study extracted all first-order constructs. Extracting first-order and second-order associations required more handwork and computerize calculation. A second-order construct was only allowed to connect to the first-order construct from which the second-order construct was induced. Through this method, a construct-construct matrix was generated.

After separating the two orders of constructs, individual responses were aggregated based on Henderson et al.'s (1998) integration method. Since there were only two interviews, all elicited constructs were aggregated. Table 5.3 presents the aggregated first –order constructs. Table 5.4 shows the aggregated second-order constructs.

FIGURE 5.1: Flowchart for marking second-order construct

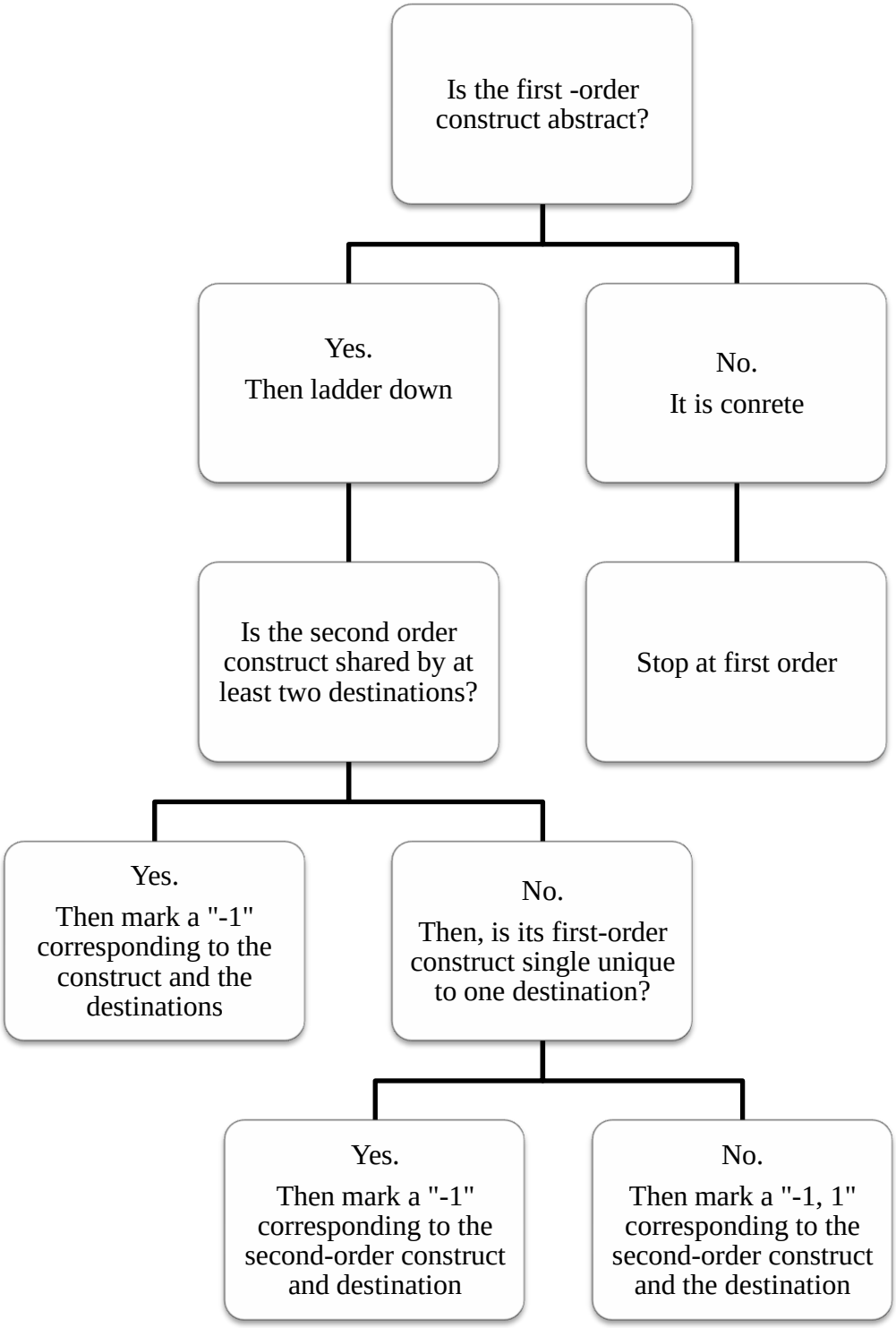


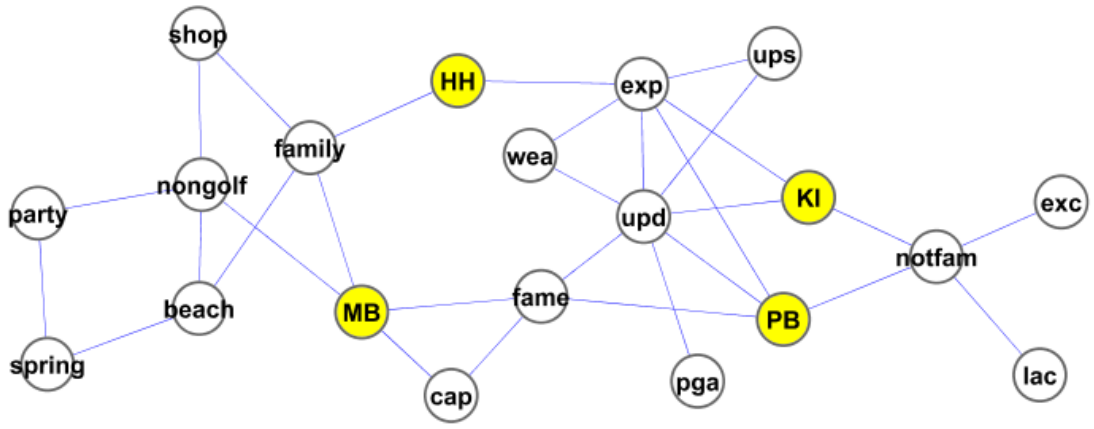
TABLE 5.3: First-order associations

Constructs	MB	HH	PB	KI
Expensive *(exp)*		1	1	1
Family vacation *(family)*	1	1		
Famous *(fame)*	1		1	
Golf Capital of the World *(cap)*	1			
Non-golfing Activities *(nongolf)*	1			
Not a family vacation place *(notfam)*			1	1
Spring Break Destination *(spring)*				
Upscale destinations *(upd)*			1	1

TABLE 5.4: Second-order associations

	Exp	Family	Fame	Nongolf	Notfam	spring	upd
Beach *(beach)*		1		1		1	
Party *(party)*				1		1	
Exclusive in golfing *(exc)*					1		
Golf Capital of the World *(cap)*			1				
Lack of family activities *(lac)*					1		
PGA/US Open *(PGA)*							1
Shopping *(shop)*		1		1			
Upscale destination *(upd)*	1		1				
Upscale golf course facilities *(ups)*	1						1
Wealthy clientele *(wea)*	1						1

FIGURE 5.1: Destination brand concept network from laddering technique



Brand Association Analysis Results

The centrality measures found that Myrtle Beach had the highest degree centrality among the four destinations (Table 5.7). As far as Myrtle Beach and its brand associations were concerned, “family vacation” and “non-golf activities” were located in the center among other brand associations. They both had a degree centrality of 4 and were very similar betweenness and closeness, suggesting that these two nodes were likely to control the access of other nodes and were closely related to Myrtle Beach, while also high on the independence from the control of other nodes. Therefore they should be considered as critical elements for the Myrtle Beach Brand. Similar analysis also could also apply to the “upscale destination” construct closely related to Pebble Beach and

Kiawah Island. The cohesion analysis found six three-member cliques in the network.

They were:

1: KI expensive(exp), upscale destination(upd)
2: PB expensive(exp),upscale destination
3: expensive(exp),upscale destination (upd), upscale golf course facilities(ups)
4: expensive(exp),upscale destination (upd), wealthy clientele(wea)
5: PB, famous(fame), upscale destination(upd)
6: MB, famous (fame), golf capital (cap)

All the results suggest that the second-order associations elicited through the laddering technique are valid and interpretable.

TABLE 5.5: Centrality measures of the association network

	C_d	C_b	C_c
MB	4	0.275731	0.422222
HH	2	0.164035	0.395833
PB	4	0.204289	0.422222
KI	3	0.07076	0.38
Beach *(beach)*	3	0.093665	0.306452
Exclusive in golfing *(exc)*	1	0	0.253333
Expensive *(exp)*	6	0.22193	0.422222
Family vacation *(family)*	4	0.219688	0.38
Famous *(fame)*	4	0.303801	0.452381
Golf Capital of the World *(cap)*	2	0	0.365385
Lack of family activities *(lac)*	1	0	0.253333
Non-golfing Activities *(nongolf)*	4	0.164912	0.345455
Not a family vacation place *(notfam)*	4	0.206628	0.333333
Party *(party)*	2	0.018616	0.267606
PGA/US Open *(PGA)*	1	0	0.306452
Shopping *(shop)*	2	0.008967	0.296875
Spring Break Destination *(spring)*	2	0.006823	0.24359
Upscale destinations *(upd)*	7	0.238986	0.431818
Upscale golf course facilities *(ups)*	2	0	0.339286
Wealthy clientele *(wea)*	2	0	0.339286

Summary

In summary, the pilot testing tested the clarity of the scripts and applicability of the research methods. Through the pilot tests, two areas were adjusted or changed. First, the instructions of the survey question were clarified to the focus of destination instead of private clubs. Second, the study would use the laddering method technique to elicit second-order brand associations instead of using the SSCP conversion. Then, this chapter reviewed the method used for data collection.

CHAPTER SIX

RESULTS

This chapter provides a detailed description of the survey and interview results. The first section reports the participants' selection of top destinations for golf vacations. The second section reports the analysis and results of the brand association interviews, including the category of brand associations and the network measurement indices of degree centrality and cohesion measurement. Detailed coding rules and an example of the interview recording sheet are attached as Appendix G and H.

Survey Results

After the pilot testing, data were collected during late February and early March, 2010. The survey was conducted in two PGM classes at Clemson University and collected 29 responses. On average these participants played golf 120 times during the past 12 months. In total the participants named 66 destinations that they considered as top places for golf vacations (see Appendix D for a complete list of the 66 destinations). The four mostly referred destinations were: Myrtle Beach, SC (MB) with19 counts; Monterey/Pebble Beach, CA (MT) with16 counts; Orlando, FL (OL) with16 counts; and Las Vegas, NV (LV) with 14 counts. These four destinations then were printed on four triad cards. Each card had a combination of three destinations.

Out of the 29 participants, seven people indicated that they would participate in the interview. The investigator then recruited another six PGM students from an additional Parks Recreation and Tourism Management (PRTM) class. The 13 participants all

indicated that they were familiar with and had some knowledge of the four destinations and their golf facilities.

Interviews Results

The interviews were conducted one week after the surveys and lasted for three weeks to fit each participant's schedule. Each interview lasted between 15 and 30 minutes. Demographic data showed that the participants were largely males (11 people, 84%). Most participants were in their junior or senior college year and from the states of North Carolina, South Carolina, and Virginia. All the participants played golf at least 50 times during the past 12 months and many played over 150 times. To protect the participants' anonymity, all participants were assigned pseudonyms. As the PGM classes were small, providing detailed demographic information was likely to reveal the participants' identity. Thus, such information was omitted in the study to protect the participants' anonymity. Most participants reported that they had visited at least one of the four locations during the past 12 months (Table 6.1).

The interviews with the PGM students enumerated more brand associations than those from the pilot testing. Each participant mentioned anywhere from 9 to 22 associations for the four destinations. The study conducted 13 interviews. At the conclusion of the 10^{th} interviews, the findings already showed the signs of saturation. The 10^{th} interview results repeated similar brand associations and did not elicit any new brand association. The remaining three interviews did not add any new findings into the data either. Therefore, the investigator decided that it was unnecessary to conduct more

interviews. The amount of data should provide adequate information to answer the research questions.

TABLE 6.1: Participant reported past destination visits

	MB		MT		OL		LV	
	visits	golfing	visits	golfing	visits	golfing	visits	golfing
Amanda	1	3			1			
Andrew	1	1			1			
Ben	6	6			2			
Bryan	3	8	1	1	2	2		
Chris	1	2			1			
Derrick	2	2						
Gabe	1	1						
Gerald	2	2	1	1	1			
Jake	2	1						
John	2	2						
Lee					1			
Mack	1				2	2		
Nicole					3			

Dimensions of the Destination Brand Associations

The results of the 13 interviews were then aggregated. To minimize trivial associations and redundancy, an association must be agreed upon by at least two people in order to be taken into account. Associations using different words, but have similar meanings, were counted as one, such as “many golf courses” and “over 100 golf courses” (see Appendix E for a complete list of the 46 elicited attributes). Table 6.2 lists the 35 brand associations, including both first-order and second-order associations. These associations were categorized based on Keller’s (1993) classification of brand association dimensions.

TABLE 6.2: Dimension of the brand associations

	MB	MT	OL	LV
Attributes				
1. Non-product related				
1.1 Price				
Expensive		9		1
Affordable		4		3
Deals	6		5	
Golf-packages	6		6	
1.2 User Imagery				
Adult vacation				8
Amateur/intermediate players	3		2	
Cater to everyone	5			4
Skilled players		7		
Wealthy clientele		10		
1.3 Usage Imagery				
Buddy outing	3	2		3
Business outing	2		2	2
Family getaway	4		5	
Party	7			11
Single's outing				3
Social outing	3	2		1
2. Product-related				
Beach	6			
Casinos				21*
Convention centers	2		2	2
Disney			26*	
Hard accessibility		3		
Long waiting period		3		
Many golf courses	7			2
Many non-golf activities	7		18*	12
Upscale courses		10		
Wide-range of Selection	8		4	2
Benefits				
1. Functional				
Responds to product-related attributes				
2. Experiential				
Family friendly	5		9	
Not family friendly		2		12

TABLE 6.2: Continued

	MB	MT	OL	LV
Primary reason is golfing	3	5		
Pure golfing experience		2		
Touristic destinations	4		6	6
3. Symbolic				
Frequent PGA tours		4		
Golf capital of the world	4			
Holds the US Open		5		
Mystique and fame		10		
Sin city				4

The numbers under each destination indicated the total number of that particular construct mentioned in the 13 interviews. There were few constructs that had a frequency greater than 13, such as "Disney". This was because a participant used Disney as a second construct for different first-order construct (such as "more non-golf activities" and "family vacation destination"). Therefore, the "Disney" construct could be counted more than once in a single interview.

Among these four destinations, Myrtle Beach had a total of 18 different brand association elicited, followed by Las Vegas (n = 17), Monterey/Pebble Beach (n = 15) and Orlando (n = 11). It should be noted that although Las Vegas ranked the second in terms of total number of elicited brand associations, most of its brand Las Vegas were tourism related rather than golf specific.

The most frequently mention brand associations for Myrtle Beach were "wide-range of selection", "many golf courses" and "many non-golf activities". For Monterey/Pebble Beach, the mostly mentioned brand associations were its "upscale golf course", "mystique and fame", and "wealthy clientele image". In Orlando, the "Disney"

image was particularly strong, followed by “many non-golf activities”. Similarly, Las Vegas was strongly perceived of its “casino” image.

Separating first-order and second-order associations

Table 6.3 shows the first-order constructs and the laddered second-order constructs, which are indented under the first-order constructs. Following the same methods used in the second pilot testing interviews, the study separated the first-order from the second-order brand constructs, and turned the second-order constructs that were unique to only one destination into first-order constructs. These first-ordered constructs are listed in Table 6.4.

The associations between first-order and second-order associations were organized into a matrix, which is too large to fit into the page layout. Instead the coded relations between the two orders of associations were written to a DL format data file for the UCINET software to process. This file is attached as Appendix F.

The relations in Table 6.2 were then translated into a diagram using the Cytoscope software (Figure 6.1). This diagram was laid out by edge betweenness to detect and visually present the subgroups in the network. The brand association map showed three distinctive subgroups: Monterey/Pebble Beach and Las Vegas stood alone by themselves, while Myrtle Beach and Orlando shared more similar attributions.

TABLE 6.3: First-order and their second-order constructs

	abbrev.	MB	MT	OL	LV
Affordable	afford	1		1	
many golf courses	many	-1,1			
deals	deals	-1		-1	
Amateur/intermediate players	amateur	1		1	
Business outing	business	1		1	1
convention centers	covent	-1		-1	-1
Cater to everyone	everyone	1			1
family vacation	family	-1			
many golf courses	many	-1		-1	
Wide-range of Selection	wide	-1		-1	
Deals	deals	1		1	
golf-packages	package	-1		-1	
Expensive	expen		1		
upscale courses	upscale		-1		
Hard accessibility	hardacc		1		
long waiting period	longwait		-1		
Golf capital	capital	1			
over 100 courses	many	-1			
Mystique and fame	fame		1		
upscale courses	upscale		-1		
holds US Open	USOpen		-1		
Frequent PGA Tours	PGA		-1		
Family friendly	family	1		1	
family getaway	famaway	-1		-1	
Disney	disney			-1,1	
Many non-golf activities	non-golf	1		1	1
beach	beach	-1,1			
disney	disney			-1,1	
casino	casino				-1,1
party	party	-1			-1
Not family friendly	notfamily		1		1
sin city	sincity				-1,1
pure golfing experience	experience		-1,1		
party town	party				-1,1
adult vacation	adult				-1,1
casino	casino				-1,1
Touristic destinations	tourist	1		1	1

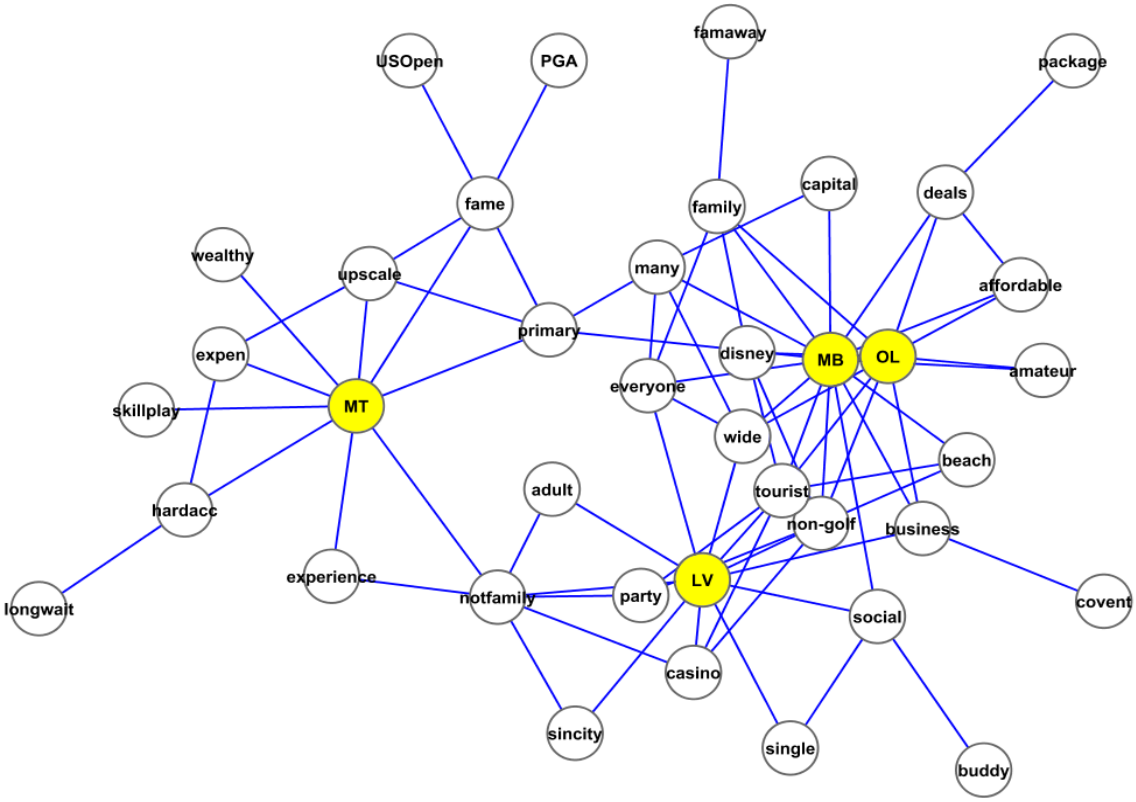
TABLE 6.3 (Continued)

	abbrev.	MB	MT	OL	LV
beach	beach	-1			
disney	disney			-1,1	
casino	casino				-1,1
party	party	-1			-1
Primary reason is golfing	primary	1	1		
many golf courses	many	-1,1			
upscale courses	upscale		-1,1		
Fame	fame		-1,1		
Skilled players	skillplay		1		
Wealthy clientele	wealthy		1		
Wide-range of Selection	wide	1		1	1
social outing	social	1	1		1
buddy outing	buddy	-1			-1
single's outing	single				-1,1

TABLE 6.4: First-order brand associations of the four destinations

	MB	MT	OL	LV
Affordable (afford)	1		1	
Amateur/intermediate players (amateur)	1		1	
Business outing (business)	1		1	1
Cater to everyone (everyone)	1			1
Expensive (expen)		1		
Fame (fame)		1		
Family friendly (family)	1		1	
Golf capital (capital)	1			
Hard accessibility (hardacc)		1		
Many non-golf Activities (nongolf)	1		1	1
Not family friendly (notfamily)		1		1
Primary reason is golfing (primary)	1	1		
Skilled players (skillplay)		1		
Social outing (social)	1	1		1
Touristic destinations (tourist)	1		1	1
Wealthy clientele (wealthy)		1		
Wide-range of selection (wide)	1		1	1

FIGURE 6.1: Aggregated brand association map of the four destinations



Network Analysis Results

The nodes' position and structural importance within the network were seen through their centralities measures. Table 6.3 provides the degree centrality, betweenness centrality and closeness centrality for all the four destinations and the 35 brand association constructs.

Among the four destinations, Myrtle Beach had the highest values on all the three centrality measures. The degree centrality for MB is 14, meaning that it has 14 first-order associations. Las Vegas is the second destination high on degree centrality (C_d = 11). Las Vegas had most first-order associations related to tourism rather than golf.

The top four brand associations with the highest degree centrality were "more non-golfing activities" (C_d = 7), "touristic destinations" (C_d = 7), "not a family friendly destination" (C_d = 7), and "wide range of selection" (C_d = 5). The top four associations that were high on the betweenness centrality were "golfing is the primary reason for visiting" (C_b = .257), "not family friendly" (C_b = .163), "mystique and fame" (C_b = .104), and "social outing place" (C_b = .071). The top four associations that were high on closeness centrality were "golfing is the primary reason to go" (C_c = .452), "many golf courses" (C_c = .418), "more non-golf activities" (C_c = .413), and "touristic destinations" (C_c = .413). The importance of brand associations and their branding implications will be discussed in the next chapter.

Cohesion tests were carried out using UCINET software. There were 20 cliques within the network. Two of them were four member cliques, the rest were all three-member cliques.

TABLE 6.5: Centrality measures of the brand associations

Nodes	C_d	C_b	C_c
MB	14	0.401	0.514
MT	9	0.289	0.413
OL	9	0.060	0.358
LV	11	0.186	0.447
adult	2	0.000	0.352
affordable	3	0.002	0.358
amateur	2	0.002	0.352
beach	3	0.000	0.376
buddy	1	0.000	0.284
business	4	0.062	0.400
capital	2	0.000	0.345
casino	4	0.013	0.392
covent	1	0.000	0.288
deals	4	0.055	0.362
disney	4	0.004	0.333
everyone	5	0.025	0.404
expen	3	0.001	0.302
experience	2	0.000	0.339
famaway	1	0.000	0.277
fame	5	0.104	0.369
family	5	0.062	0.380
hardacc	3	0.053	0.302
longwait	1	0.000	0.233
many	5	0.026	0.418
non-golf	7	0.054	0.413
notfamily	7	0.163	0.409
package	1	0.000	0.268
party	3	0.013	0.362
PGA	1	0.000	0.271
primary	5	0.257	0.452
sincity	2	0.000	0.352
single	2	0.000	0.336
skillplay	1	0.000	0.295
social	4	0.071	0.392
tourist	7	0.054	0.413
upscale	4	0.014	0.365
USOpen	1	0.000	0.271
wealthy	1	0.000	0.295
wide	5	0.018	0.400

These 20 cliques were:

1. *everyone -- many -- MB -- wide*
2. *fame -- MT -- primary -- upscale*
3. *adult -- LV -- notfamily*
4. *beach -- MB -- non-golf*
5. *beach -- MB -- tourist*
6. *capital -- many -- MB*
7. *casino -- LV -- non-golf*
8. *casino -- LV -- notfamily*
9. *casino -- LV -- tourist*
10. *disney -- family -- OL*
11. *disney -- non-golf -- OL*
12. *disney -- OL -- tourist*
13. *everyone -- family -- MB*
14. *everyone -- LV -- wide*
15. *experience -- MT -- notfamily*
16. *expen -- hardacc -- MT*
17. *expen -- MT -- upscale*
18. *LV -- notfamily -- sincity*
19. *LV -- single -- social*
20. *many -- MB -- primary*

The largest two cliques were formed around Myrtle Beach and Monterey/Pebble Beach. These two destinations also generated most primary associations. These two cliques showed clear common denominations within their groups. The brand associations around Myrtle Beach all pointed to the abundance of the golf courses, which also suggested that these brand associations are compliment to each other. For instance, Myrtle Beach had “many golf courses”, which led to “there is a wide range of selection” so that “everyone can play”. The large clique around Monterey/Pebble Beach pointed to the “fame” and “upscale” brand associations, suggesting that if one of those brand

associations is activated, likely the rest brand associations within the clique will be automatically activated as well. Same principles can be applied to the rest three-member cliques. The existence of those cliques suggested that most those brand associations were related and pointed to similar connotations.

Summary

This chapter reports the network analyses results. The results provide mathematical measures of the structural relations of the brand associations among the four golf vacation destinations.

CHAPTER SEVEN

DISCUSSION AND CONCLUSIONS

This chapter discusses the findings of the research and their theoretical and practical implications. The chapter is divided into five sections. First, the study reviews the data collection and results are reviewed to answer the three research questions. Second, the theoretical and practical implications of the research findings are discussed. Third, the limitations of this study are examined. Fourth, based on implications and limitations, recommendations for future research are made. Fifth, the theory, method and implications are summarized.

Answering the Research Questions

Brand association focuses on analyzing the characteristics and relations of consumers' knowledge, perceptions and attitudes associated with a brand. Research on brand association provides measurement constructs for branding effect evaluation and offers marketing professionals the strategic information to build strong and unique brand identity. The purpose of this study is to identify the underlying dimensions that people use to describe destination brands and examine the structural relations of the destination's brand association. Accordingly three research questions were designed to explore the brand associations, identify the dimensions and analyze the structural relations. Through two surveys with 29 PGM students, the study selected four destinations that the participants considered prototypical for golf vacations. Through 13 one-on-one

interviews with the PGM students, the study used repertory grid method and elicited the brand associations of the four destinations and the network structures of the brand associations. The study applied network analysis method to analyze the brand associations and their network structures. The results are discussed to answer the three research questions.

Question One

The first research question asks to identify the associations people use to describe destination. This question is equivalent to the unaided free association method used by most brand association studies. The free association method allows participants to describe what a brand means to them in an unstructured way (Keller, 1993). Through this method, the contents and strengths of brand associations can be analyzed.

Among the 46 brand associations, a large portion describe the scale and the quality of golf facilities, user image and usage occasions. For instance, in Myrtle Beach, the mostly referred brand association is “many golf courses” which may directly lead to the consequences that there is a “wide-range selection of different golf courses” so that this place “caters to everyone” and “everybody can play”. Similar results are also found in Orlando and Las Vegas. Between the two destinations, one is considered family friendly, and the other is mainly for adult outings and not so family friendly. Most of these brand associations are specific in what activities a destination may offer and to whom the activities are offered.

The reasons why the brand associations largely concentrate on activities and user image per se can be found in Pearce's (2005) explanation of his activity mediated destination choice model. Pearce suggests that activities are the mediating medium in tourists' decision making. He postulates that perceivable activities and user images are parts of a destination's image in tourist's minds. Tourists must be able to image themselves and their potential behaviors at that destination before they can move the destination into the choice set in their decision making. The results from this study provide empirical support to Pearce's argument.

Besides the content of brand associations, strengths of the brand associations were also analyzed. By counting the frequencies of the brand associations for each destination, the strength of brand associations can be studied either at the brand level to indicate high or low brand equity or at the individual brand association's level to reveal the salient brand features.

At the brand level, Krishnan (1996) suggests that a brand with high number of brand associations, comparing to other brands in the same product category, has relatively high brand equity. Myrtle Beach has a total of 18 different brand associations and more than the other three destinations (Monterey/Pebble Beach, Orlando and Las Vegas), suggesting that its brand equity is relatively high when compared to the other three destinations. This result is probably due to the participant's familiarity with Myrtle Beach. Krishnan (1996) emphasizes that awareness and familiarity are the two determining factors in the levels of consumer-based brand equity. In this study, Myrtle Beach is located in the same state as the participants' residence at the time of the study.

Ten participants in this study had been to Myrtle Beach previously and nine had played golf during their visits. The participants of this study had fewer experiences in the other three locations. It is reasonable that the interviews elicited more brand associations related to Myrtle Beach than those of the other three destinations.

At the individual brand association level, the findings related to the strength of brand associations reveals the most salient brand features of each destination. Myrtle Beach's brand associations are almost evenly distributed between the golfing-related and the touristic related activities. Differently, although being considered as top destinations for golf vacations by the participants, Orlando and Las Vegas have much more touristic activities related associations than the golf related. The "Disney" image of Orlando and the "casino" image of Las Vegas are predominantly strong. Only Monterey/Pebble Beach has the largest amount of golf specific brand associations.

The implications of these findings are mainly marketing practice orientated. Henderson et al. (1998) and Baack (2006) all indicate that one of the central goals of any marketing campaign is to influence the strength of the consumer's association with the brand. Depending on marketing goals, the already formed strong associations can either facilitate or hinder the marketing information delivery. Park, Milberg and Lawson (1991) and Reddy et al. (1994) postulate that if the campaigned information is consistent with the image that the consumer has in mind, then the new information is easy to be accepted and reinforce the old image. However, when the campaigned information is inconsistent with the destination already formed image, then the consumer becomes skeptical and to change or modify the brand image requires much effort.

Question Two

The second research question asks for the underlying dimensions of brand associations that people use to describe destinations. Commonly used statistical methods for identifying the dimensions of destination images include exploratory and/or confirmatory factor analysis, cluster analysis and multidimensional scaling. All these methods require a predefined item list for participants to evaluate each item on predefined scales. The data of this study were elicited through qualitative approach and do not contain such information. Thus, the common statistical approaches are inapplicable to answering this research question.

Alternatively, this study used Keller's (1993) dimensionality of brand associations as the theoretical conceptualization to answer this research question. Keller proposes four dimensions of brand associations: *type, favorability, strength* and *uniqueness*. Along the type dimension, brand associations can be further classified into three categories: *attributes, benefits,* and *attitudes*.

The study results can be summarized into three dimensions: *type, strength* and *uniqueness* (see Table 6.1 in the previous chapter). Under the *type* dimension, the brand associations fall into the categories of attributes and benefits. The attribute type of brand association include product related, such as the ones related to golf courses' scale and quality, and the non-product related such as the expensiveness, the destination's typical clientele, and usage occasions. There were few benefits brand associations found in this study, such as the "going for a pure golf experience" at Monterey/Pebble Beach (experiential benefit), or seeking the "mystique and fame at Monterey/Pebble Beach"

because it is a “lifetime experience for any true golfer” (i.e. symbolic benefits). Additionally, the results of this study did not find any brand association that was categorized as attitude.

Analysis on the strength of brand associations was discussed in the previous section. The notion of uniqueness, although not a focus of this study, was examined in this network. Each destination’s uniqueness can be calculated by counting its total number of unique brand associations over the total number of brand associations the destination brand has. Alternatively, the diagram 6.01 provides a visual representation of the uniqueness of each destination. Monterey/Pebble Beach enjoys a large amount of unique brand associations, while the other three destinations share most common attributes, suggesting they could be complement brands with each other.

Favorability can be considered as a person’s simplified and holistic evaluation towards a brand (Keller, 1993). The favorability dimension did not emerge from the study. The lack of favorability dimension could be due to the fact that the scenarios provided to the participants did not require them to evaluate the importance of each brand association for them to choose a vacation destination. Since evaluative judgment, such as favorability, is conceptually and empirically related to attribute importance (MacKenzie, 1986), it is reasonable that the participants were less likely to provide favorability judgment on brand associations that they did not feel of personally related importance.

Question Three

The third research question asks for the structural relations among the destinations' brand associations. Those relations are examined through measuring each node's centralities and network cohesions. The centrality measures include three indices: degree, betweenness and closeness. Henderson et al.'s (1996) discussion on the meanings of these indices' measure provided the guide for interpretation for this part of the study. Nodes with high degree centrality are likely to be activated upon receiving a stimulus. Nodes with high betweenness centrality are critical in controlling the spreading-activation passage to other nodes. Nodes with high closeness centrality are close to the majority of the nodes in the network and tend to be independent from the control of other nodes. Cohesions form when three or more nodes are mutually connected to each other, making them complementary. All the three centrality indices are helpful tools to identify "central" nodes that are important for examining branded features and identifying driver brand. Cohesion measures help to uncover brand association complements and select the critical features as brand identities.

Branded Feature

Brand managers can study the centrality measures to determine if their branded features have gained any expected effect among the consumers or to identify which features can be strengthened or weakened to create their desired brand identity. This study results show that "more non-golfing activities", "touristic destinations", and "not a family friendly destination" all have a degree centrality of 7, higher than any other brand association in the network. These brand associations are not unique to a specific

destination, but shared by Myrtle Beach, Orlando and Las Vegas. The results suggest both advantages and disadvantages if brand managers focus on branding those features. On one hand, those features are important because they have the most number of direct links to other nodes within the network, meaning that they can increase the breadth of the spreading-activation, in turn, more nodes will be activated. On the other hand, simply focusing on strengthening those brand features does not help to create the uniqueness for any of the three destinations in terms of golf tourism marketing. Other unique brand associations shall be considered and incorporated into creating distinctiveness.

Comparatively, many brand associations related to Monterey/Pebble Beach are unique. For this golf course, "mystique and fame" and "golfing is the primary reason for visiting" have the highest degree centralities. The former is unique to Monterey/Pebble Beach and has direct linkage to four other brand features. The latter is shared by Myrtle Beach, but for different causes – Myrtle Beach has "many golf courses" and it is the "golf capital in the US", but Monterey/Pebble Beach has its "fame" and is a "lifetime experience". Furthermore, the concept of golfing being the primary reason for visiting is also high on betweenness centrality and closeness centrality. It is reasonable to consider this brand association as a critical feature to draw tourists' attention.

For Las Vegas, the centrality measurements are distinctive. The concept of "not a family friendly destination" is high on all three centrality measures, and has a very high strength measure, as discussed in the previous section. Depending on the marketers' branding goal, this brand feature is so distinctive and strong that it may be a barrier to market Las Vegas as a place for family golf vacationers. Yet, it may also be ideal to

market as a singles outing and adult social place. It shall be noted that brand associations with low centrality measures do not necessarily mean that they are unimportant. Tourists may still consider those associations important. It is likely that consumers have different weightings for different associations. Brand managers may need to take perceived importance into consideration in order to achieve a more thorough analysis.

Driver Brand

A driver brand "represents the value proposition that is central to [consumers'] purchase decision and use experience" (Aaker, 1996a, p. 243). This study results show that Myrtle Beach is high on all three centrality measures among the four destinations. Furthermore, looking at the brand association map (Figure 6.01 in Chapter Six), one may notice that Myrtle Beach, Orlando and Las Vegas are close together, while Monterey/Pebble Beach is unique in its own style. This finding suggests that Myrtle Beach is closer to a majority of brand associations, which makes it the most prototypical selection for a golf vacation. It shall be noticed that this prototype is probably limited to a mid level and family fun market, but does not represent the market that seeks a true and distinguishing golf experience. For that market, although no other upscale golf destinations to compare against in this study, Monterey/Pebble Beach may have more competitive advantages as its brand associations clearly portray an upscale golf destination.

Brand feature complements

The centrality measures focus on the individual node level. Cohesions or cliques are group level analysis. At the group level, single brand associations are combined into a

superordinate entity that reflects areas of strong mental connectedness of brand associations (Teichert & Schöntag, 2010). Consequently, those strongly and mutually connected brand associations form complements. When consumers think of one feature, they almost automatically think of another (Henderson et al. 1998).

There are 20 cliques in the brand association network. Two of them are four-member cliques: one is in the Myrtle Beach brand (Myrtle Beach, many golf courses, wide range of selection, caters to everyone), and the other is in the Monterey/Pebble Beach brand (Monterey/Pebble Beach, upscale courses, mystique and fame, golfing is the primary reason for visiting). Each of the two cliques shows a unified facet of the destination's brand images. In the Myrtle Beach brand, this clique concentrates on large amount of golf courses in Myrtle Beach, which logically leads to the presence of other brand associations within this clique. In turn, when one of the brand associations in this clique is activated, other brand associations are likely to be activated as well. This complement characteristic makes it possible and feasible to include only the most important brand associations in the clique for creating brand identity. Considering that the centrality analysis shows that "wide range of selection" is critical, it makes sense to keep this brand feature for branding purpose instead of including all three brand associations. In the Monterey/Pebble Beach, it can be easily noticed that "mystique and fame" is the most critical brand feature that complements other related brand associations and controls the activation of other nodes. All the three-member cliques have a destination as a member of the clique, which suggests that there are only two complement brand associations in each clique. Each of the three-member cliques has a brand

association that functions as both a first-order and a second-order association. For instance, the clique of "Orlando", "Disney", and "family friendly" suggest that when tourists think of Orlando, almost simultaneously they think of it as a family friendly destination and the Disney World Resort. One may consider focusing on the "family friendly" association as it has relatively higher centralities measures than the "Disney" association.

Implications

Using the network analysis approach to study destination brands provides several theoretical and practical implications for academic research and destination branding practices. There are four theoretical implications.

First, this study shows that people's knowledge of brand is constructed as a network, in which there are multimodal brand associations (i.e. nodes). These nodes can be activated upon an external stimulus and spread the activation to a certain depth and breadth. The study results also show that these nodes can either be hierarchically linked (e.g. the relations of first-order and second-order associations), or, more often, are complex and interlinked (e.g. an association can be both a first and second-order association). This finding suggests that a strict hierarchical relation model, such as the means-end chain, may not correctly reflect the true mental connection of people's knowledge about destination brands. The study's results also show that there is relative importance of mental connections between individual nodes. A node's relative importance is built on its connection to other nodes in a complex network. Traditional

sorting and scaling tasks such as factor analysis and MDS cannot identify the relative importance of each node (Teichert & Schöntag, 2010).

Second, the findings from this research provide partial support for Keller's (1993) classification of brand association dimensions: brand associations are mainly composed of attributes and benefits and vary on strength and uniqueness. The failure for favorability dimension to emerge in this study may be attributed to the study design, because the participants did not have to make a choice decision. Future research should focus on the elicitation of this dimension and examine its importance for the final decision making.

Third, the study results reveal a large number of concrete destinations activities and specific user and usage images. This finding provides empirical support for Pearce's (2005) argument that tourists inevitably consider specific activities and potential behaviors they may have at the destination in order to make a decision. Pearce refers to Krippendorf's (1987) explanation that commonly adopted motives in tourist motivation studies are inherently vague and empty boxes that individuals can fill quite different content. For instance, in this study, "golfing is the primary reason for visiting" can be considered as a motive for visiting either Myrtle Beach or Monterey. However, the specific reasons are quite different: one is for the wide range of selection, and the other is for the fame. A statement such as "I choose this destination because it fits my personality" (Boo et al., 2009, p. 223) may be largely true for most destinations surveys that are conducted on location, but it does not tell what the respondent's personality is, nor does it provide specific content on what the destination offers to fit the personality specific to that tourist. Alternatively, recognizing tourists' destination brand perceptions

as knowledge networks and studying them as a networks provides more concrete and accurate results than using predefined items which may incorporated researcher bias.

This study also provides meaningful and applicable implications for destination branding practices. First, the study presents a new methodological tool for brand analysis. The network analysis uses repertory grid method and laddering technique to generate detailed brand association information and closely mirror people's mental image of the brand. The network analysis approach map an array of branding effects: brand features, driver brand, and complements. The network analysis also has room for further branding effect analysis, such as brand parity and brand dilution. These effects can be analyzed through examining structural equivalence and the density of individual brand association networks. All those analyses can identify pivotal brand associations and critical relations that will provide strategic information for brand management.

Second, the interview recording and data process can be computerized in the future. Although the recording process for laddering is rigorous and strenuous, and the aggregating process is tedious, the rules for recording and for aggregating are in the "if-then-else" format, which can be easily programmed for computer processes.

Limitations

There are a few limitations that need to be considered when interpreting and applying the study's results. First, this study does not consider the function of participants' perceived importance of brand associations. Thus, a brand feature that is not considered critical in this study result can still be critical if it possesses great value to the

brand equity. For example, the "Disney" brand association in Orlando has nearly a zero degree of betweenness. However, it can be an important reason for family vacationers, considering Disney's four theme parks and several high-end golf courses in Orlando.

Second, the findings may not hold valid across different travel situation. In this case, golfing is the major travel motivation. If for social outing, tourists may value the brand association differently. Thus the brand associations critical in this study probably will not still be important in the other travel scenario.

Third, as many researchers (Aaker, 1996b; Keller, 1993; Keller & Lehmann, 2006; Krishnan, 1996) have emphasized familiarity being one of the most important factors in raising high brand equity. Considering participants in this study having a relative high familiarity with Myrtle Beach, it is not surprising that Myrtle Beach has the highest brand equity among the four destinations. This result may be largely different if the same study is repeated on the west coast as people's familiarity with the destination can change quite differently.

All the limitations do not devalue the contributions of the study, but emphasize that marketing research shall be specific to the target market. There are no general rules that are applicable across every single market segment, but finding an effective marketing research tool to better answer marketing questions and achieve marketing goals is more valuable. This study provides such a tool and demonstrates that it can be valuable for destination branding research.

Future Research

This dissertation study provides insights for destination brand research, presents a new tool for effective brand and brand association analyses, and provides opportunities for future destination brand analysis. A number of future research directions can be examined.

A comparison between less knowledgeable tourists' brand concept maps and that of knowledgeable tourists will be insightful for the analyzing the underlying dimensions of brand associations. The pilot testing results from this study show much less brand associations that those yielded from the interview with the PGM students. A comparison analysis shall be able to reveal information on how people evaluate destination brands when they do not have sufficient knowledge. Consequently, further research can be designed to investigate what dimensions of brand association people with less expertise will firstly seek in order to construct a brand network with adequate information so that they can make a selection decision.

Another research direction can be a replication of this research method with the addition of the variables of travel motives, usage situation, and user income levels and psychographics. Those variables have been proven influential on purchase decision making. Taking those variables into consideration allows the examination of the network differences across different market segments. In this way, researchers can analyze more complicated decision making processes and provide more accurate marketing guidance for brand management.

Conclusion

This study presents an application of the associative network theory and network analysis methods in the field of destination branding research. Recent destination marketing research has indicated the importance of destination branding. However, most destination branding research focused on the application of branding practices. Few studies have investigated how tourists describe the brands and the structural relations among brand associations. The limited amount of destination brand equity studies have used sorting and scaling approach such as exploratory or confirmatory factor analysis to analyze brand associations. However, the sorting and scaling using predefined items cannot provide an adequate measure of the complex nature of brand associations.

As Teichert and Schöntag (2010) stated, methods for measuring consumer knowledge structure shall go beyond the predefined items and reveal the mental connections between those individual associations. This dissertation study uses the associative network theory as the theoretical conception and repertory grid method with laddering technique to mirror the mental connections people make of brand associations. The study identifies the underlying dimensions of brand associations using Keller's (1993) classification. More importantly, the study demonstrates a network analysis method that can be applied to a series of destination branding studies and produces practical implications for brand management.

APPENDICES

APPENDIX A: Survey Questionnaire

This study has to do with what we have in mind when we use words, which refer to categories. Let's take the word "dogginess" as an example. Think of dogs. You have some notion of what a real dog, a doggy dog is. To me a retriever or German Sheppard is a very doggy dog while a Pekiness is a less doggy dog. Notice that this kind of judgment has nothing to do with how well you like the things. You may prefer to own a Pekinese without thinking if it is the breed that best represents what people mean by dogginess.

Next, you are asked to provide as many examples as possible of *destinations within the US that you think are the best for golf* ***vacations*****.** Don't worry about why you feel that something is or isn't a good example of the category. And don't worry about whether it's just you or people in general who feel that way. Just provide names the way you see it.

Please, write down the names of destinations including states, but not club names or resorts. If you feel that a destination is on your top list because of certain clubs, write down the destination first, then the club(s). Please, do not repeat a destination simply because of different clubs in that location. Destinations considered mainly for private clubs shall NOT be included in your list.

The destination numbering does not indicate a ranking.

Destination 1 Location State	Destination 6 Location State
Destination 2 Location State	Destination 7 Location State
Destination 3 Location State	Destination 8 Location State
Destination 4 Location State	Destination 9 Location State
Destination 5 Location State	Destination 10 Location State

How many times did you play golf for leisure in the past 12 months? _____
In general, how many times per year do you play golf? _____

Thank you for filling out the survey. We'd like to ask you whether you would be interested in participating in the next stage of this study. The next stage is a one-on-one interview about what you think of these golf destinations, and why you choose them. Each interview will last about 15 minutes. We will conduct the interview starting the next week.

If you would like to participate in the interview, please leave your contact information below. We will contact you through email in one week to let your know the times and locations. The interviews will be scheduled off your class time.

Thank you for participating in our study.

Sincerely,

Sheila J. Backman PhD (Principal Investigator)
Xu Chen (Co-Investigator)

****

□ Yes, I'd like to participate in the interview,

Name: _____
Email: _____

□ No, I do not want to participate in the interview.

APPENDIX B: Interview Instrument

During the one-on-one interview, the participant will be presented with the following triad cards, one at a time.

Card 1:	Card 2:	Card 3:	Card 4:
Destination A Destination B Destination C	Destination A Destination B Destination D	Destination A Destination C Destination D	Destination B Destination C Destination D

After presenting a card to the participant, the co-investigator will ask the participant the following question:

Think about what you know or have heard about the above three destinations. If your friend was seeking your advice for a golf vacation, in what way do you think two of the destinations are alike, and how the third destination is different from the other two?"

After completing the interview, the participant will be asked to fill out the following questions.

Q1. We would like to have some information about you. Please circle the one which best describe you:
You are:

1. Freshman, Sophomore, Junior, Senior, Graduate
2. Female, Male,
3. Unmarried, Married

Q2. How many times did you travel for these four golf destinations during the past 12 months?
Destination Myrtle Beach, SC ( ) did you golf there? How many times ____
Destination Monterey, CA ( ) did you golf there? How many times ____
Destination Orlando, FL ( ) did you golf there? How many times ____
Destination Las Vegas, NV ( ) did you golf there? How many times ____

Q3. Who is your usual travel party? ( )

Q4. How many times did you play golf in the past 12 months? ( )

Q5. Please provide your state of origin ( )

Q6. Age ( )

APPENDIX C: Pilot testing of the SSCP Conversions

Seven students in the survey stage indicated that they would participate in the interview. However, only five students responded and scheduled for the interviews. The interviews with the five students were then conducted one week after the survey. Based on the four destinations selected, four triad cards were created with each one having a combination of three destinations. The investigator presented the cards one at a time to the participant and asked him or her in what way the two destinations were similar and the third one was different. Each interview lasted five to eight minutes.

None of the five participants played golf in any of the four destinations in the past 12 months, although they all acknowledged that they had heard the names of the places before. Four participants from South Carolina were females and had never played golf in general. The male participant was from Texas and played golf occasionally.

On average, each interview elicited about seven destination associations. A large amount of brand associations were repeated by each participant. The individual tests were then aggregated based on the Henderson et al.'s (1998) aggregation formula stated in the Research Methods Chapter. Henderson et al. (1998) and John et al. (2006) recommend to eliminate associations that have a very low frequency to avoid redundancy. However, due to the small amount of interview responses in the pilot test, all elicited brand associations that described different meanings were kept in the integrated matrix. Associations having similar meanings were revised using a consistent description. For instance, "upper class golfers" showed in interview one, while "wealthy players" showed in interview two.

These two descriptions were both turned into "upper class clientele" and counted twice as they were mentioned twice. After aggregating all the responses, the five interviews elicited 16 unique brand associations (Table C.1).

One participant referred to Pebble Beach as "less well-known". This description was contradictory to all the other participants' views. At the aggregated level, this association was removed from further analysis as the individual difference was not the study concern at the aggregated level.

TABLE C.1: Frequency distribution of elicited brand associations

	MB	HH	PB	KI
Product attributes				
A lot of resort golf courses	3	1		1
Best golf courses		3	3	3
Island destinations		3		4
Located in SC	5	5		5
More non-golf attractions	3			
Spectacular views			2	
Non-product related attributes				
1. Price				
Expensive			4	1
2. User imager				
Cater to everyone	2			
Experienced golfers		1	4	2
Family and friends	4			
Higher-end and low-end clientele	1	2		1
Upper class clientele		2	3	3
3. Usage imagery				
Frequent PGA tours		1	1	
Not for family vacation			2	3
Attitudes				
Less well-known			1	

Table C.1 is also a brand-construct relation matrix. For the simplicity and ease of data manipulation, all values greater than 0 were set to 1. Category labels of these associations were also removed. Table C.2 shows the brand-construct matrix after data cleaning.

By calculating the sum of square and cross product (SSCP) on the columns of destination brands, the study derived the relations of brand-brand (Table C.3). In this matrix, values on the diagonals represent the total number of constructs that a destination had. The off-diagonals represent the total number of constructs jointly valued between destination *i* and destination *j*.

TABLE C.2: Destination brand- construct matrix

Construct	MB	HH	PB	KI
A lot of resort golf courses	1	1		1
Best golf courses		1	1	1
Cater to everyone	1			
Expensive			1	1
Experienced golfers		1	1	1
Family and friends	1			
Frequent PGA tours		1	1	
Higher-end and low-end clientele	1	1		1
Island destinations		1		1
Located in SC	1	1		1
More non-golf attractions	1			
Not for family vacation			1	1
Spectacular views			1	
Upper class clientele		1	1	1

TABLE C.3: Destination brand – brand matrix

	MB	HH	PB	KI
MB	6			
HH	3	8		
PB	0	4	7	
KI	3	7	5	9

Similar to the conversion in the brand – brand matrix, by calculating the SSCP on the rows, the study derivates the construct – construct relationship (Table C.4). In this matrix, the diagonal values represent the total number of destination brands for which construct *i* is perceived as appropriate. The off-diagonal values represent the number of destination brands that both show the characteristics of construct *i* and construct *j*.

For simplicity and ease of data manipulation, all entries equal or greater than 1 were set equal to 1 to indicate the presence of an association. Then the three matrices above could be aggregated into one full matrix (Table C.5).

Diagrams can be drawn based on each of the four matrices. However, the study only drew the full matrix diagram (Figure C.1) as the full matrix diagram incorporates the relationships represented in all the three matrices.

The layout of this diagram was arranged according to "edge betweenness". Edge betweenness is a clustering process to detect sub-groups (also called community) within a network (see Girvan & Newman, 2002 for detailed discussion and calculation methods). The diagram showed that Myrtle Beach stood out from the other three locations, while Pebble Beach, Hilton Head and Kiawah Island shared most common brand associations. Thus, those three destinations may be considered as highly similar golf vacation destinations.

The centrality measures of all the 19 nodes showed that among the four destinations (Table C.6), Kiawah Island had the highest on all three centralities measures. The diagram also showed that Kiawah Island was most central to the constructs that describe a high-end market, such as “upper class clientele” and “upscale golf courses”.

TABLE C.4: Destination construct – construct matrix

	resort	upscale	anyone	expensive	experienced	family	PGA	widerange	island	SC	non-golf	Notfamily	views	upper
resort	3	2	1	1	2	1	1	3	3	3	1	1	0	2
upscale	2	3	0	2	3	0	2	2	2	2	0	2	1	3
everyone	1	0	1	0	0	1	0	1	1	1	1	0	0	0
expensive	1	2	0	2	2	0	1	1	1	1	0	2	1	2
experienced	2	3	0	2	3	0	2	2	2	2	0	2	1	3
family	1	0	1	0	0	1	0	1	1	1	1	0	0	0
PGA	1	2	0	1	2	0	2	1	1	1	0	1	1	2
widerange	3	2	1	1	2	1	1	3	3	3	1	1	0	2
island	2	2	0	1	2	0	1	2	2	2	0	1	0	2
SC	3	2	1	1	2	1	1	3	3	3	1	1	0	2
non-golf	1	0	1	0	0	1	0	1	1	1	1	0	0	0
notfamily	1	2	0	2	2	0	1	1	1	1	0	2	1	2
views	0	1	0	1	1	0	1	0	0	0	0	1	1	1
upper	2	3	0	2	3	0	2	2	2	2	0	2	1	3

The constructs (i.e. associations) in this table were replaced with one-word names without spacing to fit the layout of the paper and meet the requirement for software processing. The abbreviations correspond to the full construct descriptions in Table 5.3 accordingly.

TABLE C.5: Full association matrix

	MB	HH	PB	KI	resort	Up scale	Any-one	exp ensi ve	exper ience	famil y	PG A	wider ange	Is-land	SC	non-golf	Not-family	vie w	upper
MB	1																	
HH	1	1																
PB	0	1	1															
KI	1	1	1	1														
resort	1	1	0	1	1													
upscale	0	1	1	1	1	1												
anyone	1	0	0	0	1	0	1											
expensive	0	0	1	1	1	1	0	1										
experienced	0	1	1	1	1	1	0	1	1									
family	1	0	0	0	1	0	1	0	0	1								
PGA	0	1	1	0	1	1	0	1	1	0	1							
widerange	1	1	0	1	1	1	1	1	1	1	1	1						
island	0	1	0	1	1	1	0	1	1	0	1	1	1					
SC	1	1	0	1	1	1	1	1	1	1	1	1	1	1				
non-golf	1	0	0	0	1	0	1	0	0	1	0	1	1	1	1			
notfamily	0	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1		
view	0	0	1	0	0	1	0	1	1	0	1	0	0	0	0	1	1	
upper	0	1	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	1

FIGURE C.1: Destination brand concept network

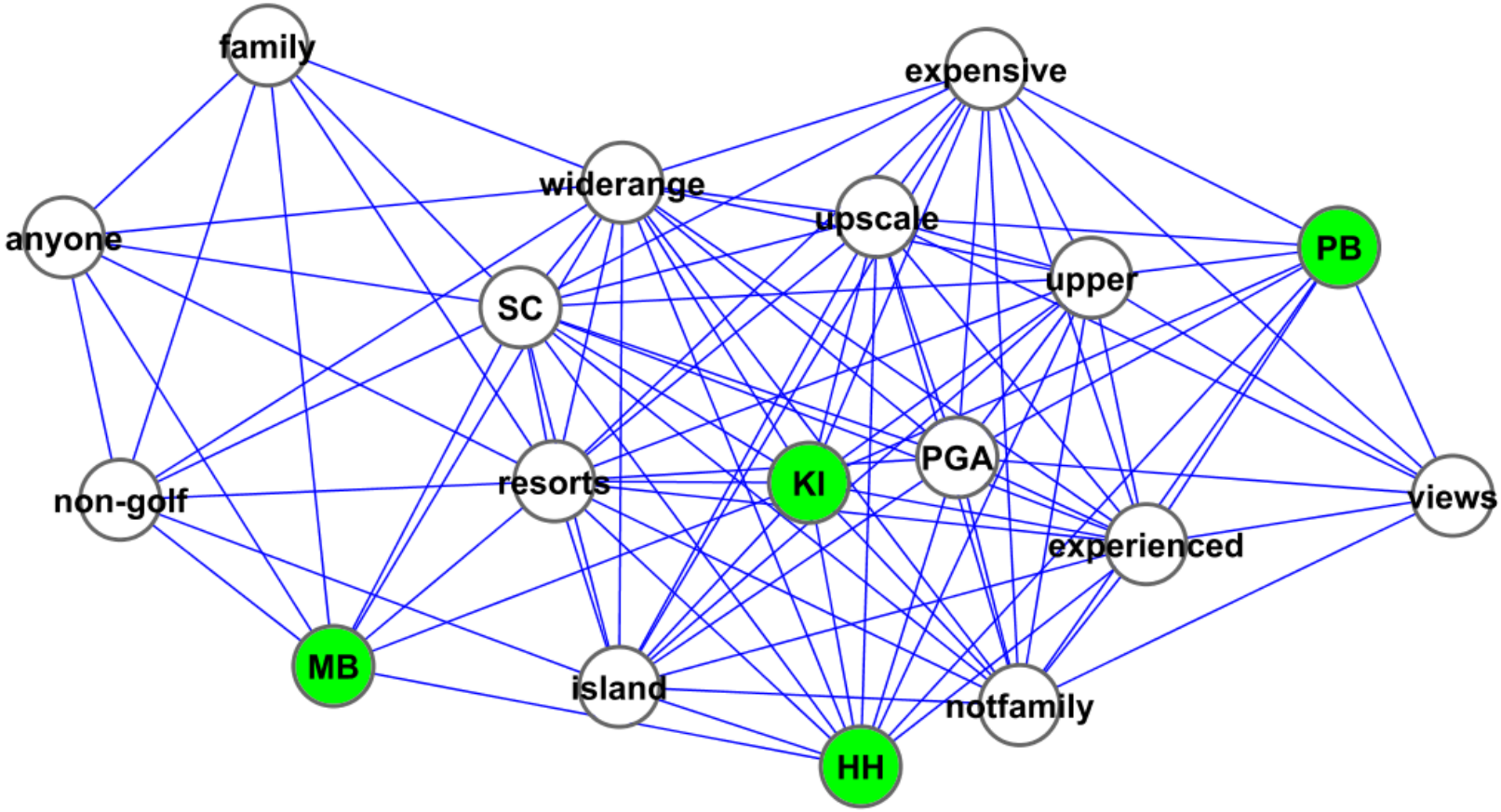


TABLE C.6: Centralities measures – destination brands and associations

Construct	Degree	Betweenness	Closeness
MB	11	0.020108	0.73913
HH	8	0.011858	0.62963
PB	9	0.005342	0.607143
KI	12	0.023002	0.772727
A lot resort type golf courses *(resorts)*	15	0.082219	0.894737
Best golf courses *(upscale)*	13	0.02092	0.809524
Cater to everyone *(everyone)*	6	0	0.566667
Expensive *(expensive)*	12	0.017725	0.772727
Experienced golfers *(experienced)*	13	0.02092	0.809524
Family and friends *(family)*	6	0	0.566667
Frequent PGA tours *(PGA)*	12	0.018772	0.772727
Higher-end and low-end clienteles *(widerange)*	15	0.082219	0.894737
Island destinations *(island)*	12	0.019678	0.772727
Located in SC *(SC)*	15	0.082219	0.894737
More non-golf attractions *(nongolf)*	7	0.004902	0.586207
Not for family vacation *(notfamily)*	12	0.017725	0.772727
Spectacular views *(views)*	7	0	0.548387
Upper class clienteles *(upper)*	13	0.02092	0.809524

The analyses on the brand associations prove problematic. On one hand some measures still provide meaningful insight. For instance, the results suggest that "a lot of resort golf courses", "higher-end and low-end clienteles" and "located in South Carolina" all have the highest measures on all the three centrality indices. These three associations also have the highest edge betweenness because they are the only common attributes that Myrtle Beach shares with a higher-end market. On the other hand, using these three constructs as the most branded features may not be ideal for the following reasons. First, all the three constructs are shared by either two or three destinations, in other words, none of the constructs is unique. Second, construct "located in South Carolina" seems odd to be used as an important branding construct. This construct's centrality measures are higher than those of "experience golfers" or "frequent

PGA tours", which are likely more appropriate to be used as meaningful branding constructs considering that the three destinations are both located in South Carolina.

Testing of cohesions found five cliques. Each clique was formed when at least three brand associations were mutually connected. These cliques are:

1: resorts, upscale, expensive, experienced, PGA, widerange, island, South Carolina, notfamily, upper
2: resorts, anyone, family, widerange, SC, non-golf
3: HH, PB, KI
4: MB, HH, KI
5: upscale, expensive, experienced, PGA, notfamily, view, upper

The first one encloses 10 constructs. Members within a clique indicate that they are complementary and can replace each other. However, what the mathematical results hold may not always seem logical in the sense of branding practice. It is reasonable to think of "expensive", "upscale" and "PGA tours" being complementary as Pebble Beach's branded features. However, in the case of clique 1, in which "upscale", "island", "SC", "wide range of selection" and a few other constructs are grouped, mutual and complementary relationships probably do not necessarily hold but seem farfetched. Furthermore it is difficult to decide which ones of the 10 constructs should be emphasized in a branding strategy, because their centrality measures are all very close.

The reasons causing these problems lay in the SSCP conversion, which mathematically creates a direct link between two nodes as long as there is at least one node mutually connected to the two nodes. The SSCP conversion is mostly used in network studies of inter-organizational relationship(Burt, 1980). Breiger (1974) instructed that two criteria that must be met for SSCP to be valid are symmetry membership and transitivity. He explained that symmetry membership is a mutual connection between person *a* and *b* if they have a shared membership. However, whether

to assign this symmetry relationship is “a fundamental theoretical issue, not a technicality of computation” (Breiger, 1974, p.184). Transitivity requires that “two nodes must be mutually ‘reachable’ along the path of length *n* if there exists a sequence of *n* contiguous ties between them” (Breiger, 1974, p. 185). In the case of the pilot testing data, these transitivity relations may not always hold true. For instance, “not family friendly” and “located in South Carolina” are both mutually and directly related to “Kiawah Island”. However, it is awkward to say that those two constructs should be directly connected because they have a shared membership in “Kiawah Island”. The relation between “not family friendly” and Kiawah Island is descriptive in nature rather than a person-group, which indicates that two descriptive features can lose their meaning if not attached to the subject they describe. Using the SSCP conversion can force such two features into a direct connection, which may not either be valid in real sense or correctly reflect what the participant has in mind. Considering these drawbacks and difficulties in data analysis and results interpretation, the study did not use SSCP conversion to generate second-order associations, but used the laddering technique with the repertory grid method to elicit second-order associations.

APPENDIX D: List of the 66 Destinations from the Survey

Destination	Counts	Destination	Counts
MYRTLE BEACH, SC	19	ANAPOLIS, MD	1
MONTEREY/PEBBLE BEACH, CA	16	AMELIA ISLAND, FL	1
ORLANDO, FL	16	BANGOR, ME	1
LAS VEGAS, NV	14	BETHPAGE BLACK, NY	1
SCOTTSDALE, AZ	13	CATSKILL MOUNTAINTS., NY	1
CHARLESTON, SC	12	COEUR D'ALENE, ID	1
PINEHURST, NC	12	DAVIS, WV	1
SAN DIEGO, CA	11	DAYTON, OH	1
HILTON HEAD, SC	9	DESTIN, FL	1
MIAMI, FL	8	DUBLIN, OH	1
BANDON DUNES, OR	6	EL PASO, TX	1
DALLAS, TX	6	FARMINGDALE, NY	1
ATLANTIC CITY, NJ	5	FLAGSTAFF, AZ	1
JACKSONVILLE, FL	5	FOREST DUNES CPT, MI	1
PALM SPRINGS, CA	5	FOXWOODS, CT	1
LOS ANGELAS, CA	4	GREENBRIER, WV	1
NAPLES, FL	4	HERSHEY, PA	1
SEA ISLAND, GA	4	HOT SPRINGS, VA	1
MAUI, HI	3	JEKYLL ISLAND, GA	1
OCEAN CITY, MD	3	JERSY SHORE, NJ	1
SAN FRANCISCO, CA	3	KAPALUA, HI	1
WASHINGTON, DC	3	KILLINGTON, VT	1
AUGUSTA, GA	2	LONG ISLAND, NY	1
BOSTON, MA	2	MESQUITE, NV	1
CHICAGO, IL	2	RALEIGH-DURHAN, NC	1
DENVER, CO	2	ROBERT T. JONES TRL, AL	1
FORT MYERS, FL	2	ROCKVILLE, MD	1
HONOLULU,HI	2	SAN ANTONIO, TX	1
NEW YORK, NY	2	SOUTHERN PINES, NC	1
PONTE VERDE BEACH, FL	2	VERO BEACH, FL	1
VIRGINIA BEACH, VA	2	VERONA, NY	1
WILLIAMSBURG, VA	2	WINGED FOOT, NY	1
ALBEQURQUE, NM	1	WISTON-SALEM, NC	1

APPENDIX E: Complete List of the 46 Elicited Constructs

	MB	MT	OL	LV
Adult vacation				8
Affordable	4			3
Amateur/intermediate players	3		2	
Beach	6			
Big private facilities		1	1	
Buddy outing	3	2		3
Business outing	2		2	2
Casinos				21*
Cater to everyone	5			4
Convention centers	2		2	2
Course itself is an attraction		1		
Deals	6		5	
Disney			26*	
Expensive		9		1
Fame		3		
Family friendly	5		9	
Family getaway	4		5	
Frequent PGA Tours		4		
Golf capital of the world	4			
Golf-packages	6		6	
Hard accessibility		3		
Holds the US Open		5		
Long waiting period		3		
Lots of restaurant	1		1	1
Many golf courses	7			2
Many non-golf activities	7		18*	12
Moving to low-end market	1			
Mystique and Fame		10		
Not family friendly		2		12
Over 100 courses	2			
Party	7			11
Primary reason is golfing	3	5		
Pure golfing experience		2		
Saturated with employees	1			
Seasonal golf course				1
Shared membership			1	1
Shopping			1	1

Complete List of the 46 Elicited Constructs (Continued)

	MB	MT	OL	LV
Sin city				4
Single's outing				3
Skilled players		7		
Social outing	3	2		1
Touristic destinations	4		6	6
Upscale courses		10		
Wealthy clientele		10		
Weekend getaway	1			
Wide-range of Selection	8		4	4

* The frequencies in this number do not represent the amount of people mentioned those constructs, but the total number of times that those constructs were referred as both a first-order and second-order associations. Therefore their values are greater than 13.

APPENDIX F: DL Format Data of the 1st and 2nd Order Constructs

```
dl n=39, format=edgelist1
labels:
adult,affordable,amateur,beach,buddy,business,capital,casino,covent,deals,dis
ney,everyone,expen,experience,famaway,fame,family,hardacc,longwait,LV,many,MB
,MT,nongolf,notfamily,OL,package,party,PGA,primary,sincity,single,skillplay,s
ocial,tourist,upscale,USOpen,wealthy,wide

data:
      1     25    1
      2     26    1
      2     22    1
      2     9     1
      3     22    1
      3     26    1
      4     24    1
      4     35    1
      5     34    1
      6     26    1
      6     20    1
      6     22    1
      7     22    1
      7     21    1
      8     20    1
      8     35    1
      8     24    1
      8     25    1
      9     6     1
      10    22    1
      10    26    1
      11    35    1
      11    24    1
      11    17    1
      12    22    1
      12    20    1
      13    23    1
      14    25    1
      16    30    1
      16    23    1
      17    12    1
      17    15    1
      17    22    1
      17    26    1
      18    19    1
      18    13    1
      18    23    1
      20    1     1
      20    32    1
      20    31    1
      21    12    1
      21    30    1
      22    21    1
      22    4     1
      23    14    1
      23    36    1
```

```
24    20    1
24    26    1
24    22    1
25    20    1
25    23    1
26    11    1
27    10    1
28    35    1
28    25    1
28    24    1
29    16    1
30    22    1
30    23    1
31    25    1
32    34    1
33    23    1
34    22    1
34    20    1
35    22    1
35    20    1
35    26    1
36    30    1
36    16    1
36    13    1
37    16    1
38    23    1
39    21    1
39    12    1
39    22    1
39    26    1
39    20    1
```

Note: Data in this file format that denotes directed or asymmetrical associations between nodes, meaning each link has only one direction and is not reciprocal. The directions of the links originate from the nodes in the first column and point to the corresponding nodes in the second column. However, many of the measures of network properties computed by UCINET are defined only for symmetric data. To adjust this problem, the data were symmetrized using the UCINET software.

APPENDIX G: Coding Rules

Data are firstly coded on the individual response level and then aggregated to generate a consensus response of the four destinations' brand associations.

Stage1: Generate a dictionary of brand association constructs

During the interviews, participants used different expressions to describe same or very similar concepts. A participant might also use different words and phrases interchangeably to repeat similar brand associations. Therefore it is necessary to compile a dictionary that summarizes and labels the words and phrases have the same or similar meanings. This dictionary shall include all the brand associations elicited in all 13 interviews.

Example: (note: phrases in UPPER CASES are the **label**s for their group of brand associations)

RESORT DESTINATION
Resort destinations, hotels affiliated with golf, big resort courses, country club resorts

GOLF CAPITAL
Golf Capital of the US, Golf Capital of the world

MANY COURSES:
Hundred of course, over 100 courses, many courses, lots of courses

MYSTIQUE AND FAME
Mysterious, famous, renowned, golfer's dream place, once in a life experience

AFFORDABLE
Affordable, cheap, inexpensive, budget, reasonably priced

PRIMARY REASON GOLFING
Golfing is the primary reason to go, go there just for golf

THEME PARKS
Theme parks, roller coasters

Brand associations that belong to a specific destination shall not be summarized but kept to preserve the destination's salient and unique attributes. For instance, among the brand associations of "Disney", "theme park", "roller coaster" and "casino", "Disney" and "Casino" shall be kept because they are unique to specific destinations. However, "theme park" and "roller coaster" can be aggregated because these phrases are general descriptions and not as specific as "Disney" or "casino".

Stage 2: Organize each individual's response

During the interview, the participant's responses were written down on a recording sheet, which was arranged in the way matching the presentation sequence of the four triadic cards. Since all destinations were compared against each other three times throughout an interview, consequently quite a few band associations repeatedly mentioned several times during the interview. Thus, responses from each personal interview must be organized to reduce redundancy and generate an aggregated brand association table for the four destinations.

In this stage, three rules shall be followed.

2.1 Create a five-column table, with multiple rows. Create this table in MS-Excel if possible to provide the ease for data aggregation in the next stage.

Example:

Brand Associations	**MB**	**MT**	**OL**	**LV**

2.2 Read a brand association on the recording sheet, and then find its matching label in the dictionary. Write down the label in the brand association column and finding its corresponding destination(s), and use its original marker (i.e. 1; -1; -1,1) on the recording sheet to mark the relation.

Example:

Brand Associations	**MB**	**MT**	**OL**	**LV**
Resort destination		1	1	
Many courses	1		1	

2.3 A brand association is only marked once if it is a first-order brand association, but can be marked multiple times if it is used as a second-order brand association. In the example below, the association "Many courses" is marked three times. In the first time, it is a first-order brand association. In the second and third times it is a second order brand association.

Example:

Brand Associations	**MB**	**MT**	**OL**	**LV**
Resort destination		1	1	
Many courses	1		1	
Affordable	1		1	1
Many courses	-1			
Primary reason golfing	1	1		
Many courses	-1,1			

Once all 13 interviews were organized and cleaned, individual responses can be aggregated.

Stage 3: Aggregate Individual Responses

To generate the aggregated responses, firstly we need to separate the first-order brand associations from the second-orders.

3.1 In the Excel spread sheet, set all cells' property as "TEXT" instead of "NUMBER". Use the formula *IF(CELL="-1,1",1,IF(CELL="1",1,0))* to extract all first-order associations.

3.2 The second-order associations cannot be separated from their corresponding first-order associations. Otherwise, the meaning of being a "second-order" will not exist. Aggregating the second-order association largely requires manual work.

3.3 A brand association is taken into account only when it had been mentioned by at least two participants, regardless it is a first or second order association.

APPENDIX H: An Example of Interview Recording

ID: __JAKE (pseudonym)___ Date:___02/19/2010_____

Think about what you know or have heard about the above three destinations. If your friend was seeking your advice for a golf vacation, in what way do you think two of the destinations are alike, and how the third destination is different from the other two? You may group them differently based on different criteria

A

Construct	Myrtle	Monterey	Orlando
Host PGAs		1	1
US Capital of golf	1		
Famous b/c of 1 or 2 courses		1	1
Golfer's paradise		1	
➔ Fame and mystique		-1	
➔ Mecca of the golf world		-1	
Men's social gathering place (buddies hang out)	1		
Expensive		1	
➔ Upscale golf facility		-1	
➔ Famous, world renown		-1	
Family gathering	1		1
➔ Not just golfing, also tourist activities	-1		-1
➔ Beach front, grand strand	-1,1		
➔ Disney	-1,1		

E

Construct	Myrtle	Monterey	Las Vegas
Men's gathering, buddies hang out place		1	1
➔ Casinos			-1,1
➔ Nothing for kids or women		-1,1	
Numerous bars	1		1
Tourist destination first, then golf destination	1		1
Pure golfing experience		1	
Sin city			1

c

Construct	Myrtle	Orlando	Las Vegas
Classic golf destination	1		
➔ So many of golf courses	-1		
➔ Golf capital	-1		
They are all tourist destinations	1	1	1
➔ Beach	-1,1		
➔ Boardwalk	-1,1		
➔ Theme parks	-1	-1	
➔ Shopping	-1	-1	-1
Family friendly destination	1	1	
➔ Beach	-1,1		
➔ Many non-golfing activities	-1	-1	
➔ Disney		-1,1	
Not family friendly destination			1
➔ What happens in Vegas stays in Vegas			-1
➔ Singles outing place			-1
➔ Men/women adult outing place			-1
➔ A place you don't want to take kids with you			-1
Less expensive for golfing	1	1	
➔ Often you can get deals	-1	-1	
- So many to choose from	-1,1		

D

Construct	Monterey	Las Vegas	Orlando
Family friendly destination			1
➔ Disney			-1
➔ Shopping			-1
➔ The place where you take kids to			-1
Not quite a family vacation place	1	1	
➔ Nothing for non-golfers, maybe some spas	-1,1		
➔ Casinos		-1,1	
➔ Adult nightlife		-1,1	
➔ Nothing for kids	-1	-1	
➔ Couples outing place		-1,1	
➔ Singles outing place		-1,1	
Expensive	1	1	
➔ High-end facilities	-1,1		
➔ One or two famous courses		-1,1	
Less expensive, most people can afford			1
➔ Deals			-1

REFERENCES

Aaker, D. A. (1991). *Management brand equity: Capitalizing on the value of a brand name*. New York: Free Press.

Aaker, D. A. (1996a). *Building strong brands*. New York, NY: Free Press.

Aaker, D. A. (1996b). Measuring brand equity across products and markets. *California Management Review, 38*(3), 102-120.

Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research, 34*(3), 347-356.

Anantachart, S. (1998). *A theoretical study of brand equity: Reconceptualizing and measuring the construct from an individual consumer perspective.* Unpublished Doctoral dissertation, University of Florida.

Anderson, J. R. (1983). *The architecture of cognition*. Cambridge MA: Harvard University Press.

Ashworth, G., & Kavaratzis, M. (2009). Beyond the logo: Brand management for cities. *The Journal of Brand Management, 16*, 520-531.

Austin, J. R., Siguaw, J. A., & Mattila, A. S. (2003). A re-examination of the generalizability of the aaker brand personality measurement framework. *Journal of Strategic Marketing, 11*(2), 77.

Avraham, E. (2009). Marketing and managing nation branding during prolonged crisis: The case of Israel. *Place Branding and Public Diplomacy, 5*(3), 202-211.

Azoulay, A., & Kapferer, J.-N. (2003). Do brand personality scales really measure brand personality? *Journal of Brand Management, 11*(2), 143-155.

Backman, S. J. (1994). Using a person-situation approach to market segmentation. *Journal of Park and Recreation Association, 12*(1), 1-16.

Baker, M. J., & Cameron, E. (2008). Critical success factors in destination marketing. *Tourism and Hospitality Research, 8*, 79-97.

Balakrishnan, M. S. (2009). Strategic branding of destinations: A framework. *European Journal of Marketing, 43*(5/6), 611-629.

Baloglu, S., & McCleary, K. W. (1999). A model of destination image formation. *Annals of Tourism Research, 26*(4), 868-897.

Bartra, R., Lenk, P., & Wedel, M. (2003). Separating brand from category personality, working paper Retrieved March 20, 2009, from http://webuser.bus.umich.edu/plenk/Brand%20Personality.pdf

Baum, T., Hearns, N., & Devine, F. (2008). Place branding and the representation of people at work: Exploring issues of tourism imagery and migrant labour in the republic of ireland. *Place Branding and Public Diplomacy, 4*, 45-60.

Bell, C. (2008). 100% pure New Zealand: Branding for back-packers. *Journal of Vacation Marketing, 14*(4), 345-355.

Bergqvist, R. (2009). Place marketing in a logistics context: A swedish case study and discourse.(original article)(case study). *Place Branding and Public Diplomacy, 5*(1), 54-66.

Blain, C., Levy, S. E., & Ritchie, J. R. B. (2005). Destination branding: Insights and practices from destination management organizations. *Journal of Travel Research, 43*(4), 328-338.

Boo, S. (2006). *Multidimensional model of destination brands: An application of customer-based brand equity*. University of Nevada, Las Vegas, Las Vegas, NV.

Boo, S., Busser, J., & Baloglu, S. (2009). A model of customer-based brand equity and its application to multiple destinations. *Tourism Management, 30*(2), 219-231.

Breiger, R. L. (1974). The duality of persons and groups. *Social Forces, 53*(2), 10p.

Burt, R. S. (1980). Models of network structure. *Annual Review of Sociology, 6*(1), 79-141.

Cai, L. A. (2002). Cooperative branding for rural destinations. *Annals of Tourism Research, 29*(3), 720-742.

Calder, B. J., Phillips, L. W., & Tybout, A. M. (1981). Designing research for application. *Journal of Consumer Research, 8*(2), 197-207.

Caprara, G. V., Barbaranelli, C., & Guido, G. (2001). Brand personality: How to make the metaphor fit? *Journal of Economic Psychology, 22*(3), 377-395.

Che, D. (2008). Sports, music, entertainment and the destination branding of post-fordist detroit. *Tourism Recreation Research, 33*(2), 195-206.

Chen, A. C.-H. (2001). Using free association to examine the relationship between the characteristics of brand associations and brand equity. *Journal of Product & Brand Management, 10*(7), 439.

Coaffee, J., & Rogers, P. (2008). Reputational risk and resiliency: The branding of security in place-making. *Place Branding and Public Diplomacy, 4*, 205-217.

Collins, A. M., & Loftus, E. F. (1975). A spreading activation theory of semantic processing. *Psychological Review, 82*(6), 407-428.

Cook, R. A., Yale, L. J., & Marqua, J. J. (2008). *Tourism: The business of travel* (4th ed.). Upper Saddle River, NJ: Prentice Hall.

Cromption, J. L. (1979). An assessment of the image of mexico as a vacation destination and the influence of geographical location upon that image. *Journal of Travel Research, 17*(1), 18-23.

Dosen, D. O., Vranesevic, T., & Prebezac, D. (1998). The importance of branding in the development of marketing strategy of croatia as tourist destination. *Acta Turistica, 10*(2), 93-182.

Echtner, C. M., & Ritchie, J. R. B. (1993). The measurement of destination image: An empirical assessment. *Journal of Travel Research, 31*(4), 3-13.

Eden, C., & Jones, S. (1984). Using repertory grids for problem construction. *Journal of the Operational Research Society, 35*, 779-790.

Farquhar, P. H. (1989). Managing brand equity. *Marketing Research, 1*(3), 24-33.

Forristal, L. J., & Lehto, X. Y. (2009). Place branding with native species: Personality as a criterion.(original article). *Place Branding and Public Diplomacy, 5*(3), 213-226.

Fransella, F., Bell, R., & Bannister, D. (2004). *A manual for repertory grid technique*. West Sussex, England: John Wiley & Sons, Ltd.

Freeman, L. C. (1979). Centrality in social networks conceptual clarification. *Social Networks, 1*(3), 215-239.

Gartner, G. (1993). Image formation process. *Journal of Travel & Tourism Marketing, 2*(2/3), 191-215.

Girvan, M., & Newman, E. J. (2002). Community structure in social and biological networks. *Proceedings of the National Academy of Sciences of the United States of America, 99*(12), 7821-7826.

Gladden, J. M., & Funk, D. C. (2001). Understanding brand loyalty in professional sport: Examining the link between brand associations and brand loyalty. *International Journal of Sports Marketing & Sponsorship, 3*(1), 67(28).

Gnoth, J. (2008). Buillding control mechanisms into destination branding. *Romanian Marketing Review, 3*(4), 100-119.

Goldenberg, M. A., Klenosky, D. B., O'Leary, J. T., & Templin, T. J. (2000). a means-end investigation of ropes course experiences. *Journal of Leisure Research, 32*(2), 208-224.

Gutman, J. (1982). A means-end chain model based on consumer categorization processes. *Journal of Marketing, 46*(2), 60-72.

Hankinson, G. (2004). The brand images of tourism destinations: A study of the saliency of organic images. *Journal of Product & Brand Management, 13*(1), 6-14.

Hankinson, G. (2005). Destination brand images: A business tourism perspective. *Journal of Service Marketing, 19*(1), 24-32.

Hankinson, G. (2009). Managing destination brands: Establishing a theoretical foundation. *Journal of Marketing Management, 25*, 97-115.

Hanna, S., & Rowley, J. (2008). An analysis of terminology use in place branding. *Place Branding and Public Diplomacy, 4*(1), 61-75.

Henderson, G. R., Iacobucci, D., & Calder, B. J. (1998). Brand diagnostics: Mapping branding effects using consumer associative networks. *European Journal of Operational Research, 111*(2), 306-327.

Henderson, G. R., Iacobucci, D., & Calder, B. J. (2002). Using network analysis to understand brands. *Advances in Consumer Research, 29*(1), 397-405.

Hosany, S., & Ekinci, Y. (2003). *An application of the brand personality scale to tourist destinations: Can destinations be branded?* Paper presented at the the 34th Annual Travel and Tourism Research Asscoiation Conference, St. Louis, MO, USA.

Hospers, G.-J. (2009). Lynch, urry and city marketing: Taking advantage of the city as a built and graphic image.(original article). *Place Branding and Public Diplomacy, 5*(3), 226-233.

Hsieh, M.-H. (2004). Measuring global brand equity using cross-national survey data. *Journal of International Marketing, 12*(2), 28-57.

Hudson, S., & Ritchie, J. R. B. (2009). Branding a memorable destination experience. The case of lsquobrand canadarsquo. *International Journal of Tourism Research, 11*(2), 217-228.

Hunt, J. D. (1975). Image as a factor in tourist development. *Journal of Travel Research, 13*(3), 1-7.

InterBrand (2009). Best global brands Retrieved November 25, 2009, from http://www.interbrand.com/best_global_brands.aspx

Janiszewski, C., & Van Osselaer, Stijn M. J. (2000). A connectionist model of brand-quality associations. *Journal of Marketing Research, 37*(3), 331-350.

Jones, T., Nagata, S., Nakajima, M., & Masuyama, K. (2009). Prefectural branding in japan--tourism, national parks and the shinshu brand.(original article). *Place Branding and Public Diplomacy, 5*(3), 192-201.

Keller, Kevin L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing, 57*(1), 1-22.

Keller, Kevin L. (1998). *Strategic brand management: Building, measuring and managing brand equity*. Upper Sadle River, NJ: Prentice Hall.

Keller, Kevin L. (2001). *Building customer-based brand equity: A blueprint for creating strong brands*. Boston, MA: Marketing Science Institute.

Keller, Kevin L. (2003a). Brand synthesis: The multidimensionality of brand knowledge. *Journal of Consumer Research, 29*(4), 595-600.

Keller, Kevin L. (2003b). *Strategic brand management* (2nd ed.). Upper Saddle River, NJ: Pearson Education.

Keller, K. L. (2008). *Strategic brand management: Building, measuring and managing brand equity*. Upper Saddle River, NJ: Prentice Hall.

Keller, Kevin L., & Lehmann, D. R. (2006). Brands and branding: Research findings and future priorities. *Marketing Science, 25*(6), 740-759.

Kelly, G. A. (1955). *The psychology of personal construct*. New York: Norton.

Kim, S. K. S., Chun, H., & Petrick, J. F. (2005). Positioning analysis of overseas golf tour destinations by korean golf tourists. *Tourism Management, 26*(6), 905-917.

Klenosky, D. (2002). The "Pull" Of tourism destinations: A means-end investigation. *Journal of Travel Research, 40*(4), 385.

Kneesel, E., Baloglu, S., & Millar, M. (2010). Gaming destination images: Implications for branding. *Journal of Travel Research, 49*(1), 68-78.

Knoke, D., & Kuklinski, J. H. (1982). *Network analysis* (3rd ed.). Berverly Hills, CA: Sage.

Knoke, D., & Yang, S. (2007). *Social network analysis* (2nd ed.). Thousand Oaks, CA: Sage.

Konecnik, M., & Gartner, W. C. (2007). Customer-based brand equity for a destination. *Annals of Tourism Research, 34*(2), 400-421.

Konecnik, M., & Go, F. (2008). Tourism destination brand identity: The case of Slovenia. *The Journal of Brand Management, 15*, 177-189.

Kotler, P., Bowen, J., & Maken, J. (2003). *Marketing for hospitality and tourism* (3rd ed.). Upper Saddle River, NJ: Pearson Education Inc.

Krippendorf, J. (1987). *The holiday makers: Understanding the impact of leisure and travel*. London: William Heinemann.

Krishnan, H. S. (1996). Characteristics of memory associations: A consumer-based brand equity perspective. *International Journal of Research in Marketing, 13*(4), 389-405.

Kwon, H. J. (2003). *The effects of prototypicality on vacation destination choice behavior.* Unpublished Doctoral Dissertation, Clemson University, Clemson, SC.

Lawson, R. (2002). Consumer knowledge structures: Background issues and introduction. *Psychology & Marketing, 19*(6), 447-455.

Lee, H., & Jain, D. (2009). Dubai's brand assessment success and failure in brand management--part 1.(student's corner). *Place Branding and Public Diplomacy, 5*(3), 234-246.

Lee, S., Toth, E. L., & Shin, H. (2008). Cognitive categorisation and routes of national reputation formation: Us opinion leaders' views on south korea.(papers). *Place Branding and Public Diplomacy, 4*(4), 272-286.

Low, G. S., & Lamb, C. W. J. (2000). The measurement and dimensionality of brand associations. *Journal of Product & Brand Management, 9*(6), 350 - 370.

MacKenzie, S. B. (1986). The role of attention in mediating the effect of advertising on attribute importance. *Journal of Consumer Research, 13*, 174-195.

Marketing Science Institute (1988). *Marketing research institute research topics:1988-90*. Cambridge, MA: Marketing Science Institute.

Marsden, D., & Littler, D. (2000). Repertory grid technique an interpretive research framework. *European Journal of Marketing, 34*(7), 816-834.

Marzano, G., & Scott, N. (2009). Power in destination branding. *Annals of Tourism Research, 36*(2), 247-267.

Mazurek, M. (2008). *Tourism destination branding: A competitive marketing strategy - does it really matter? A case study of kremnica, slovakia.* Paper presented at the Proceedings of the 4th Graduate Student Research Symposium, Victoria, BC, Canada.

Merrilees, B., Miller, D., & Herington, C. (2009). Antecedents of residents' city brand attitudes. *Journal of Business Research, 62*(3), 362-367.

Mitchell, A. A., & Dacin, P. A. (1996). The assessment of alternative measures of consumer expertise. *Journal of Consumer Research, 23*(3), 219-239.

Morgan, N., Pritchard, A., & Piggott, R. (2002). New Zealand, 100% pure. The creation of a powerful niche destination brand. *Journal of Brand Management, 9*(4/5), 335-354.

Nadeau, J., Heslop, L., O'Reilly, N., & Luk, P. (2008). Destination in a country image context. *Annals of Tourism Research, 35*(1), 84-106.

Naoi, T., Airey, D., Iijima, S., & Niininen, O. (2006). Visitors' evaluation of an historical district: Repertory grid analysis and laddering analysis with photographs. *Tourism Management, 27*(3), 420-436.

National Golf Foundation (2010). Research faq's. Retrieved February 12, 2010, from http://www.ngf.org/cgi/faqa.asp?

O'Connor, N., Flanagan, S., & Gibert, D. (2008). The integration of film-induced tourism and destination branding in yorkshire, uk. *International Journal of Tourism Research, 10*, 423-437.

Ooi, C.-S. (2008). Reimagining singapore as a creative nation: The politics of place branding. *Place Branding and Public Diplomacy, 4*(4), 287-302.

Park, C. W., Milberg, S., & Lawson, R. (1991). Evaluation of brand extensions - the role of product feature similarity and brand concept consistency. *Journal of Consumer Research, 18*(2), 185-193.

Pearce, P. (2005). *Tourist behavior: Themes and conceptual schemes*. Clevedon, UK: Channel View Publications.

Petrick, J. F., & Backman, S. J. (2002a). An examination of the construct of perceived value for the prediction of golf travelers' intentions to revisit. *Journal of Travel Research, 41*(1), 38.

Petrick, J. F., & Backman, S. J. (2002b). An examination of the determinants of golf travelers' satisfaction. *Journal of Travel Research, 40*(3), 252.

Petrick, J. F., Backman, S. J., Bixler, R., & W.C., N. (2001). Analysis of golfer motivations and constraints by experience use history. *Journal of Leisure Research, 33*(1), 57-70.

Pike, S. (2003). The use of repertory grid analysis to elicit salient short-break holiday destination attributes in New Zealand. *Journal of Travel Research, 41*(3), 315-319.

Pike, S. (2007). Consumer-based brand equity for destinations -- practical dmo performance measures. *Journal of Travel & Tourism Marketing, 22*(1), 51 - 61.

Pike, S. (2008). *Destination marketing: An integrated marketing communication approach*. Burlington, MA: Butterworth-Heinemann.

Pike, S. (2009). Destination brand positions of a competitive set of near-home destinations. *Tourism Management, 30*(6), 857-866.

Pritchard, A., & Morgan, N. (1998). 'mood marketing' -- the new destination branding strategy: A case study of 'wales' the brand. *Journal of Vacation Marketing, 4*(3), 215-229.

Quillian, M. R. (1969). The teachable language comprehender: A simulation program and theory of language. *Communications of the ACM, 12*(8), 459-476.

Reddy, S. K., Holak, S. L., & Bhat, S. (1994). To extend or not to extend - success determinants of line extensions. *Journal of Marketing Research, 31*(2), 243-262.

Roedder-John, D., Loken, B., Kim, K., & Monga, A. B. (2006). Brand concept maps: A methodology for identifying brand association networks. *Journal of Marketing Research (JMR), 43*(4), 549-563.

Scholderer, J., & Grunert, K. G. (2005). Do means-end chains exist? Experimental tests of their hierarchicity, automatic spreading activation, directionality, and self-relevance. *Advances in Consumer Research, 32*(1), 530-530.

Shani, A., Wang, Y., Hutchinson, J., & Lai, F. (2009). Applying expenditure-based segmentation on special-interest tourists: The case of golf travelers. *Journal of Travel Research*, 0047287509346852.

Simon, C. J., & Sullivan, M. W. (1993). The measurement and determinants of brand equity - a financial approach. *Marketing Science, 12*(1), 28-52.

Skinner, H. (2008). The emergence and development of place marketing's confused identity. *Journal of Marketing Management, 24*, 915-928.

Steenkamp, J.-B. E., & Van Trijp, H. C. M. (1994). Perceptual mapping based on idiosyncratic sets of attributes. *Journal of Marketing Research, 31*(1), 15-27.

Stock, F. (2009). The borat effect.(original article). *Place Branding and Public Diplomacy, 5*(3), 180-191.

Supphellen, M. (2000). Understanding core brand equity: Guidelines for in-depth elicitation of brand associations. *International Journal of Market Research, 42*(3), 319-338.

Tasci, A. D. A., & Denizci, B. (2009). Destination branding inputoutput analysis: A method of evaluating productivity. *Tourism Analysis, 14*, 65-83.

Tasci, A. D. A., & Kozak, M. (2006). Destination brands vs destination images: Do we know what we mean? *Journal of Vacation Marketing, 12*(4), 299-317.

Teichert, T. A., & Schöntag, K. (2010). Exploring consumer knowledge structures using associative network analysis. *Psychology and Marketing, 27*(4), 369-398.

Trueman, M., Cook, D., & Cornelius, N. (2008). Creative dimensions for branding and regeneration: Overcoming negative perceptions of a city. *Place Branding and Public Diplomacy, 4*, 29-44.

van Duijn, M. A. J., & Vermunt, J. K. (2006). What is special about social network analysis? *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences, 2*(1), 2-6.

Vasudevan, S. (2008). The role of internal stakeholders in destination branding: Observations from kerala tourism. *Place Branding and Public Diplomacy, 4*, 331-335.

Wagner, O., & Peters, M. (2009). Can association methods reveal the effects of internal branding on tourism destination stakeholders? *Journal of Place Management and Development, 2*(1), 52-69.

Wagner, O., Peters, M., & Schuckert, M. R. (2009). Internal branding in tourism destinations: Implications for tourism policy and research. *International Journal of Tourism Policy, 2*(4), 274 - 288.

Wang, Y. (2008). Collaborative destination marketing: Roles and strategies of convention and visitors bureaus. *Journal of Vacation Marketing*, *14*(3), 191-209.

Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. New York: Cambridge University Press.

Wee, T. T. T. (2004). Extending human personality to brands: The stability factor. *Journal of Brand Management, 11*(4), 317-330.

Wooten, M. H., & Norman, W. C. (2008). Interpreting and managing special events and festivals. In A. G. Woodside & D. Martin (Eds.), *Tourism management: Analysis, behaviour and strategy* (pp. 197-217). Cambridge, MA: CAB International.